# AMERICAN GAS ASSOCIATION MONTHLY

*August 1927*

Volume IX Number 8

To the

GAS INDUSTRY OF AMERICA:

We take pleasure in announcing that, all essential details being complete, the Natural Gas Association of America and the American Gas Association are amalgamated into a single body under the name of the American Gas Association, Inc., as of August 1, 1927.

All elements of the gas industry in North America, manufactured and natural, are now one body united for the advancement of the industry and the development of its usefulness to the people whom it serves.

ALEXANDER B. MACBETH,
President, American Gas Ass'n

N. C. McGOWEN,
President, Natural Gas Ass'n of America

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**of the Eighth Annual Convention of the American Gas Association**

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# AMERICAN GAS ASSOCIATION MONTHLY

420 LEXINGTON AVENUE, NEW YORK, N. Y.

HOWARD F. WEEKS, *Editor*



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Have You Made Your
Reservations
for the
Ninth Annual Convention
of the
American Gas Association?

Chicago, Ill.
Stevens Hotel
October 10-14



*SUBSCRIPTION RATE* — *$3.00 PER YEAR*



For statements and opinions contained in papers and discussions appearing herein, the Association does not hold itself responsible.



Entered as Second Class Mail Matter at the Post Office at Brattleboro, Vermont, February 10th, 1922, under the Act of March 3, 1879.

# Our Own Who's Who

## XXVII

### Clifford E. Paige

BORN in Cleveland, Ohio, May 2, 1884. Moved to Springfield, Mass., in 1885. Left school in 1897 and worked in a grocery store from 1897 to 1899. Attended Wesleyan Academy from 1899 to 1901. Again he sought employment in a grocery store and worked there until 1903. In 1903 he entered the employ of the Springfield Gas Light Company at Springfield, Mass., as an office boy. Was made an assistant superintendent in 1905 and then became superintendent of the Malden and Melrose Gas Light Company at Malden, Mass. He became manager of that company in 1912. In 1919 he was appointed manager of the Worcester Gas Light Company at Worcester, Mass. In 1922 he was elected vice-president of Charles H. Tenney & Company of Boston, Mass. In addition to that position he became president of the Beverly Gas & Electric Company of Beverly, Mass. On August 15, 1924, he became vice-president of the Brooklyn Union Gas Company. Was president of New England Ass'n of Gas Engineers, 1923; president, New England Ass'n of Gas Managers, 1924; director of A. G. A. from 1923 to 1925; treasurer, A. G. A., 1926-7.

# AMERICAN GAS ASSOCIATION MONTHLY

Vol. IX AUGUST, 1927 No. 8

## Chicago Will Be Center of Interest Oct. 10-14

### Ninth Annual Convention at Hotel Stevens Promises To Be Most Important Meeting

A CONSTANTLY expanding program of Association activities, reflecting as it does an industry operating at high efficiency and growing at a normal and healthy rate, warrants the belief that the forthcoming Chicago convention of the American Gas Association (Stevens Hotel, Chicago, Ill., Oct. 10-14) will be one of the most important and representative gatherings of gas men ever held.

*Copies of the seal of the Ninth Annual Convention will be supplied to members on request*

From all angles the Chicago meeting bids fair to establish new records. The business program to be built around the recommendations of the Three-to-Five-Year Program Committee, now the charter of the gas industry, will cover every major subject of present-day significance to the gas man. Never before has the industry had more competent committee personnel working on the solution of problems national in scope. The reports of these committees, augmented by addresses covering other pertinent subjects by nationally prominent men, will constitute a varied and practical program of interest to everyone.

The Program Committee, consisting of C. A. Munroe, chairman, B. J. Mullaney, Mary E. Dillon, H. S. Shutt, C. J. Ramsburg, O. H. Fogg, H. W. Hartman, and K. R. Boyes, is making every attempt to eliminate unnecessary detail and procedure from the program to insure the convenience of the members and their guests. The same method is to be followed which proved so successful last year at Atlantic City when no printed reports or papers were delivered at the General Sessions. All speakers will present new matter from the rostrum, and all printed papers and reports of the general committees will be distributed at the Registration Desk

While it is too early to announce a definite program with speakers, the following recommendations of the Three-to-Five-Year Program Committee will be followed in order that the convention theme may be timely and of the greatest importance:

1. Improvement of sales methods for the purpose of retaining and expanding the domestic load.

*Chicago—meeting place of the entire industry the week of Oct. 10*

2. Proper rate structures.
3. Technical research.
4. Safety work.
5. Laboratory.
6. Industrial load, touching upon advertising, exhibit of appliances, and research.
7. National advertising.
8. Education.

The entertainment features of the Ninth Annual Convention will be under the jurisdiction of the Entertainment Committee, consisting of W. J. Clark and W. A. Sauer, co-chairmen, R. S. Doull, W. M. Fowler, H. C. Cummins, W. E. Derwent, A. L. Tossell, B. H. Gardner, E. A. Norman, and Thos. Scofield, secretary.

Ladies' card parties and teas will be on the program, in addition to the usual evening functions that have proved so popular in the past at A. G. A. conventions. Special features, such as a sightseeing trip for the ladies, etc., are also under consideration, and announcement concerning these will be given in the September issue of the MONTHLY.

In making public these announcements, the Program Committee purposes to show the membership that every effort is being made to put on the best gas convention ever held. The general theme of the business sessions is well chosen and the speakers are specialists in their particular fields and can talk with authority on the subjects assigned to them. Reservations for accommodations should be made promptly.

## Additional Exhibitors Listed for Chicago Show

SINCE publication in the June and July issues of the MONTHLY of the list of manufacturers taking space at the Ninth Annual Exhibition of the A. G. A. to be held at the Stevens Hotel, Chicago, Ill., October 10-14, the following have applied for booths:

Groble Gas Regulator Company, Anderson, Ind.

Klimatic Clothes Dryer Corp., New York, N. Y.

General Brass Company, Detroit, Mich.

Drake Non-Clinkering Furnace Block Co., New York, N. Y.

## Utica Company Opens New Office Building

MORE than twenty-two thousand people attended the formal opening and housewarming of the new six-story office building of the Utica Gas and Electric Co., Utica, N. Y., recently.

Luncheon, commercial and women's clubs visited the building in the evenings. To every visitor was given a souvenir booklet entitled "What Do You Know About Utica?" This booklet contained 500 questions relating to the history and present-day accomplishments of the city of Utica and included in the group were some fifty questions pertaining directly to the Utica Gas and Electric Company.

One of the largest gas-fired heating plants has been installed in the basement.

**ALL member companies of the American Gas Association are again reminded that the use of the A. G. A. seal on their stationery and publications is strongly recommended. Electrotypes of the seal may be had by writing to Headquarters, 420 Lexington Ave., New York, N. Y.**

# A Message to the Younger Generation

## That Applies Equally Well to All Our Members Regardless of Their Official Age

By ALEXANDER FORWARD
Managing Director, American Gas Association

COINCIDENT with the announcement that the Ninth Annual Convention of the American Gas Association, to be held at the Hotel Stevens, Chicago, Ill., October 10 to 14, will deal with subjects of paramount interest to the entire gas industry, manufactured and natural, is the realization that a large attendance of the younger men will be both beneficial to the industry and helpful to the gas companies.

*"I'll see you in Chicago"*

Enough is settled of the program of the Chicago meeting to establish it as one of the most important conventions ever held by the industry. Every phase of the business will be considered in the general and section programs, and the speakers will be those best qualified to present authoritative and interesting material.

The younger men, who are so vital to the future success of our industry, will derive a great deal of knowledge, and, more, gain a real appreciation of the size, spirit, and activity of a business that is more than a century old in years, but is essentially young in aggressiveness and pride of accomplishment.

The executives need no urging on the advisability of attendance by the younger men. They realize that contact with the national association conventions affords first hand knowledge of national problems, and a wealth of information that makes them more valuable to their companies, more capable in the performance of their duties.

The officials of the Association urgently appeal to the younger men for their own sakes that they may bring to the attention of their superiors the real value of attendance at the Chicago meeting and to the executives to see to it that the juniors are present.

In past years when the convention has been held at Atlantic City, the Eastern companies have been especially generous in permitting their employees to attend. There is every reason to believe that they will not curtail their lists this year, but, on the contrary, will extend the privilege to more men than ever, since these companies are well aware of the benefits that come from convention attendance.

The Western and Mid-Western companies will, of course, increase their quotas, in order that as many as possible will benefit from the first mid-western convention of the A. G. A. in five years.

No description of the convention would be complete without the warning

(Continued on page 474)

# Beal Medal Awarded to F. W. Sperr, Jr.

## To Be Presented at Convention in Chicago; Is First Time Anyone Has Received Award Twice

*F. W. Sperr, Jr.*

THE 1926 Beal medal, offered for the best technical paper presented at the annual convention of the American Gas Association, has been awarded to Frederick W. Sperr, Jr., director of research, The Koppers Company, Pittsburgh, Pa. Mr. Sperr's paper on "The Dehydration of Manufactured Gas," which was read at the 1926 convention in Atlantic City, was selected by the A. G. A. Committee on Award of the Beal Medal as being most worthy of the award.

Mr. Sperr has the honor of being the only man in the gas industry to receive the Beal Medal twice, having been given the Medal in 1921.

The medal will be presented to Mr. Sperr at the Ninth Annual Convention, which is to be held at the Hotel Stevens, Chicago, Illinois, October 10 to 14, by T. R. Beal, president of the Central Hudson Gas and Electric Corp.

The Committee, which consisted of the President, Alexander B. Macbeth, the present chairman of the Technical Section, Walter C. Beckjord, and the immediate past chairman, J. P. Haftenkamp, was unanimous in awarding the medal to Mr. Sperr.

In their opinion the paper was worthy of such high recognition not only because of the amount of original research done in the preparation of the data, but also because of the great value the paper has to the gas industry as a whole.

Mr. Sperr was born in 1885 at Jefferson, Ohio. He graduated from the Michigan College of Mines in 1902, with the degree of B.A., and from Ohio State University in 1906. He is a member of the Sigma Xi and Phi Beta Kappa honorary scholastic fraternities.

After serving as research chemist for the Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa., for two years he became a civil and mining engineer. In 1910 he joined the staff of the by-product coke plant of the Illinois Steel Company at Joliet, Illinois, and in 1911 went with the Tennessee Coal, Iron and R. R. Co. In 1913 he became chief chemist of the coke and blast furnace departments of the Inland Steel Company, and in 1915 joined the Koppers Company as chief chemist. Since then he has been director of research for the Koppers Co. He has also been advisory senior fellow, coke fellowship, at the Mellon Institute since 1915.

Mr. Sperr is a member of the following societies: American Chemical Society, American Institute of Chemical Engineers, Chemists Club, Franklin Institute, American Gas Association, American Society for Testing Materials, Coal Research Club, Eastern States Blast Furnace and Coke Oven Association, Army Ordnance Association.

Mr. Sperr holds various United States and foreign patents relating to coke oven apparatus, by-product recovery, liquid distillation, and manufacture of resins, paints, varnishes, refractory cements, ammonium sulphate, insecticides, gas purification, naphthalene removal, etc.

The Beal Medal was originally presented by the late W. R. Beal in 1897 for the best paper read at the meetings of the American Gas Light Institute, and the offer was renewed when the American Gas Institute was formed. When the American Gas Association was incorporated in 1919, T. R. Beal generously renewed the offer on behalf of the Beal

(Continued on page 500)

*Unloading coke and carrying it from curb to cellar window*

# The Real Facts of Successful Coke Sales

## The Splendid Results at Rochester Show How Well the Job of Coke Merchandising Can Be Done

By V. A. MILLER

Manager, By-Product Sales Dept., Rochester Gas and Electric Corp., Rochester, N. Y.

IN the March, 1926, issue of the American Gas Association MONTHLY there was published an article on the equitable distribution of guaranteed coke to the domestic trade in Rochester, N. Y., by the Rochester Gas and Electric Corporation during the anthracite coal strike of 1925 and 1926.

This article is written for the purpose of showing the subsequent effect and consequent wisdom of such a policy during an emergency.

To do so, it is necessary to explain how the company classified its customers during the emergency as outlined in the previous article.

There were three classes of customers; i.e.: First Class Customers—This class included both old and new customers who had filled their bins between April 1 and August 31, 1925. Such customers were taken care of to the extent of their requirements, but were expected to anticipate their needs at least one week in advance and we made the delivery in order to protect our patrons against diversion to users of fuel who were not entitled to our coke during the emergency.

Second Class Customers—This class was intended to take care of people who moved into Rochester from some other village or city after the strike was declared on September 1, 1925. Such customers had no opportunity to establish business relations before the declaration of the strike. They were taken care of to the extent of their requirements, if in our judgment they had not bought fuel from some other source since signing their meter application, and application was dated subsequent to September 1, 1925.

Third Class Customers—This class consisted of old customers who purchased coke from us between April 1, 1924, and March 31, 1925, but did not fill their bins between April 1 and August 31, 1925. Such customers were given the same tonnage as they had pur-

chased during the previous heating season.

The writer realizes that many believe that during such an emergency greater profit should be secured than during periods of a plentiful supply of fuel. In other words, get all the traffic will bear. That, no doubt, is true if one disregards the after effect of such a policy. But we believe that a public utility such as the Rochester Gas and Electric Corporation cannot afford to take advantage of such an emergency with the resultant backfire of criticisms.

We not only told the people of Rochester through the press that our coke price would not be advanced, but we offered to send our demonstrators to teach them how best to use the fuel they had whether it was imported coke, soft coal, or our own product.

When conditions were most acute the writer gave a radio talk on the "Burning Question," outlining how coke should be used.

By this time the reader is probably wondering what good it did to go to all this trouble when it was not necessary. Just sell to anyone! It would have been far easier. Let me say here that one who has not tried to distribute coke during an emergency on an equitable basis has no idea of the unpleasantness to be encountered. However, it all pays in the long run.

On April 1, 1925, when we announced our spring sales policy it was necessary for us to hold our salesmen in the office to augment our regular office force. During that month we sold 26,020 tons, the maximum monthly tonnage sold since we have been selling coke. The salesmen were permitted to sell nights after leaving the office and the sales of the eight men amounted to 7,018 tons, or only 26.97 per cent of the total. This year (1927), of 36,208 tons sold, the salesmen's tonnage was 68.91 per cent of the total.

There can be no doubt that "To Serve Well Is To Sell Well." People would come to us with their orders and tell us that if we would go to all that trouble to take care of our regular customers at no increase in price, they wanted to be a customer of ours. Mind you, most of these people had been skeptics as to the value of our product and now they are handing us their business unsolicited. Do you think it paid to play the game on the square?

As stated in the previous article, we expected to have 160,000 tons of coke available for sale during the calendar year of 1926, but, as is often the case with estimates, the starting of new plants and the shutting down of old ones, things go awry, and our actual sales for the calendar year of 1926 were 136,660 tons. However, for the 1926-1927 heating season, that is, from April 1, 1926, to March 31, 1927, our sales were 156,959 tons, so that our estimates turned out to be fairly accurate on a heating year basis. That tonnage was an increase of 48,563 tons, or 44.8 per cent over the previous heating season.

It is my opinion that this increase in sales in one year would have been impossible regardless of the amount of sales effort and the quality of our service, had it not been for the equitable distribution of our product during the previous heating season when some others were getting all the traffic would bear.

This brings us to the question of service, by which I mean delivery service. Ten years ago when we started the development of our coke market, we furnished part of our delivery service and contracted for the balance. It did not take us long to find out that we had comparatively few complaints when our own equipment effected the delivery, but just as soon as we had to hire equipment we had plenty of trouble.

For the past three years we have been furnishing 100 per cent of our delivery service and we are proud to say that we get more compliments than complaints; furthermore, we deliver more tonnage from April to September inclusive than

*Forty-four vehicles are housed in this coke truck garage*

we do during the heating season which permits us to give almost immediate service during the heating season. While we do not publish it, our motto for service is, "No Long Waits and No Short Weights."

Our coke delivery service is directly in charge of two inspectors of deliveries. The head inspector has complete charge of the garage where the coke trucks are housed and his jurisdiction extends to the final housing of our product on the customers' premises.

We insist on our men giving first class delivery service regardless of the amount of tonnage delivered per truck per day, and we have found by experience that the men who do the best work also deliver the most tonnage. The driver is in charge of the truck and we naturally look to him for results. All drivers have to serve their apprenticeship as helpers, so the best helpers are promoted to drivers whenever there is a vacancy. By the same token, the best drivers receive the best pay, so the best men are always striving to do the best and most work.

Such details as using house canvasses, closing cellar windows, cleaning up, etc., have a very great effect on the customer and the attention we give to these details is the essence of the compliments we receive.

Good tools too are essential if men are to do good work, and, last but not least, good statistics are necessary also.

Each day before noon we post the previous day's deliveries for each truck on a bulletin board so that the individual driver knows that we know just how much tonnage he is delivering, and how much the other drivers are delivering. In addition to that we have an accident bulletin board on which are posted the accidents that occur. These are not posted against truck numbers but against drivers' names. The two records are used in making promotions and increasing wages. It is the "Handwriting on the Wall" that counts.

Whenever a customer phones or writes in that the driver did good work in effecting delivery, it is brought to my attention and I in turn write a letter to the inspector of delivery to compliment that driver and his helper on their fine work. My letter is posted on the bulletin board for the benefit of the other drivers and is a great help in keeping up their morale. Too many thorns without any roses are heart-breaking and I know that our men are striving for compliments from our customers. They frequently ask us to go and look at the job they did at "so and so's." We always go and if it is as good as they say we compliment them on their good work.

We get most of our constructive criti-

cism from our drivers and helpers and we never hesitate to ask them for their opinion in solving our problems. We have no executive halos and we are always glad to get suggestions from anyone. With the above insight as to our sales policy and service you, no doubt, will be interested to know what we expect to do during 1927 and the heating year April 1 to March 31, 1928.

The year 1927 promises to be the banner year for coke sales inasmuch as we are actually making an effort to develop our coke market ahead of our plant development, this, too, in the face of competition. This procedure was decided upon early in the year and our sales force was kept actively in the field and augmented from time to time as good men applied for positions as coke salesmen.

From January 1 to June 14, 1927, we have sold 115,500 tons, and if our predictions come true our sales for the calendar year will be close to 180,000 tons, and for the heating season, around 200,000.

At the present time we have 34,000 tons sold and undelivered which will keep our trucks busy until August 15, if no more coke is sold and we continue our present delivery rate which averages 648 tons per working day, or 548 tons per calendar day. This delivery record is slightly higher than our schedule as it is our aim to deliver 3500 tons per five and one-half day week. However, the cool weather has favored us thus far, but when it warms up deliveries will undoubtedly drop.

For the past two years we have had a big seasonal demand the latter part of September and during October and for that reason we are marking time for a while on sales, so that our undelivered tonnage will not prevent our giving good service. It is a peculiar thing, however, that during the years we have anticipated a seasonal demand, we did not get it; and the past two years when we were not prepared for it, we had a deluge of orders with the first cold snap of fall that embarrassed us.

We have a fine load curve, but if we could only guess the weather we could improve it.

In my opinion our success in developing our coke market has been due to our liberal sales policy (described in the previous article), the best delivering and demonstrating service we know how to give; and, last but not least, the courage to spend money for clerks to supply reliable statistics daily to guide our activities. For knowledge, thorough and specific, and unceasing study of the facts and forces affecting our business are essential to our success and efficient service to the public.

## LABORATORY ISSUES FIRST WATER HEATER APPROVALS

**THE Testing Laboratory, R. M. Conner, director, issued the first list of approved water heaters on July 1. There is every indication that the next approval list, published on or about August 1, will contain a considerably larger list of water heaters bearing the Blue Star Seal of approval.**

**The list as of July 1 is as follows:**

**Bastian-Morley Co.**
**4 Premier**
**Cleveland Heater Co., The**
**50 FR Rex**
**70 FR Rex**
**51 Rex**
**32-53 Rex Automatic Storage**
**Detroit-Michigan Stove Co.**
**Detroit Jewel Div.**
**45 Detroit Jewel**
**Garland Div.**
**35 Garland**
**Dunham Company, The**
**9 Bull's Eye**
**Hotstream Heater Co., The**
**70 Hotstream**
**Humphrey Company**
**13041 Acme Automatic Storage**
**5R Humphrey**
**Pittsburg Water Heater Co.**
**35 Pittsburg Lion Storage System**
**Ruud Mfg. Co.**
**20A0 Autohot**
**Sands Mfg. Co., The**
**70 Trojan**
**80 Sands**
**28 Sanco**
**Welsbach Company**
**2 Hotzone**

# Blue Star Seal Plan Gains Momentum

## Laboratory Approved Appliances Growing in Popularity; Executive Board Approves Special Resolution

THE Executive Board of the Association at a meeting held on June 3 approved a recommendation coming from the Managing Committee of the Commercial Section to the effect, inasmuch as the present number of Laboratory approved models of gas ranges, space heaters and flexible gas tubing is sufficient to meet the merchandising requirements of member gas companies for this equipment, that all member companies of the Association be urged to restrict their purchases in future to manufacturers whose entire production and sale of ranges, space heaters, and tubing have been tested and approved by the Laboratory. The resolution further urges all gas companies to notify manufacturer companies to this effect.

A means of procedure is now suggested to member gas companies for the creation of additional interest in the sale of quality gas burning appliances and of reaching a class of trade at present the least interested in our activities. Gas companies are finding it possible to enter into working agreements with local appliance dealers and plumbers extending to them sales cooperation upon condition that they will deal only in appliances which have been approved by the Laboratory at Cleveland.

A means of negotiating to this end is in presenting to such dealers a copy of the list of approved appliances and of furnishing them all subsequent lists and supplements as they become available. The latest list includes the manufacturers' names, trade names and model numbers of 5033 gas ranges, 146 space heaters, 17 water heaters, and 15 types of flexible gas tubing. It will be supplemented from time to time by additional lists not only of these types of appliances but also of

**TO promote the adoption of the Blue Star Seal Plan of Merchandising and to make its application easy for the gas company, the A. G. A. has prepared the following material which is being supplied free of charge:**

**Window display cards**
**Envelope stuffers**
**Advertisements (copy and matrices)**

**Orders for the above should be sent to Association Headquarters, while orders for copies of the laboratory Approval Lists should be sent direct to the A. G. A. Testing Laboratory, foot of East 62nd St., Cleveland, Ohio. All orders will be filled promptly.**

central house heating equipment and later other domestic appliances. The list is published in a very attractive binder and is available at $2 per copy to include all approval lists to be issued in future.

It is now believed from information reaching headquarters that practically all of the gas company merchandising programs are being shaped around the exclusive sale of approved appliances and a number of progressive companies have already adopted the plan of distributing lists of appliance approvals to their local dealers.

The officers of the Association sincerely believe that such distribution of lists will be a valuable contribution to the efforts of gas companies to encourage greater sale of gas appliances, to raise the standard of such appliances and to make the work of the Laboratory more fully effective in both its commercial and safety features.

Comment both on the resolution adopted by the Executive Board and on the suggestion made with reference to purchase and distribution by each gas company of lists of approved appliances would be greatly appreciated.

---

## Inefficient Bureaucracy

MERLE THORPE, in *Nation's Business Magazine*, says:

"Government grows and grows and grows.

"Bureaucracy is a dead hand on industrial endeavor. It battens on the moor of stupidity, political favoritism, economic fallacy. When Government leaves its rightful field of endeavor and enters the field of business, all real incentive to serve the public gives way to red tape, to political skullduggery, and to mediocre performance.

"Consider the example of the Government's experiment in shipping. The people, through Congress, ordered the disposal of the ships; today, after seven years and the expenditure of $226,000,000 in operating expenses, we hear proposals of a rebuilding program and an issue of merchant marine bonds.

"Ask any shipping man about the Government's operating of ships, and he will tell you unbelievable tales of waste and petty politics. But he will caution you not to quote him. Why? 'The Shipping Board,' he will say, 'has the power to ruin me.'

"Bureaucracy in fine flower!"

---

## School for Industrial Salesmen to Be Held in September

THE Third School for Industrial Gas Salesmen will take place from September 19 to October 1, inclusive, in New York City in the Auditorium of the Consolidated Gas Company.

The Committee on Education of Personnel of the Industrial Gas Section, under whose auspices this course is given, feel that there is need for two distinct types of courses in industrial gas, one stressing the technical phase of the work and one stressing the sales and economic phase of the work. By cooperating with the New England Gas Association such a division has been brought about in the east, M. I. T. giving instruction in the technical phases of industrial gas in their two weeks' course, the sixth of which was held in June, while this year the School for Industrial Gas Salesmen will cover only the subjects coming under the head of the sales and economic aspect of this work.

One of the main features will be a thorough course in Industrial Gas Salesmanship by Prof. Elmer E. Ferris, Professor of Salesmanship at the New York University, who has had considerable contact with the American Gas Association and is at present writing a book on industrial gas salesmanship which he will be able to use as a text in this course. Prof. Ferris will conduct three three-hour sessions personally and two of the afternoons will be given over to assignments for the students to work out on salesmanship based on Prof. Ferris' lectures.

Sessions will be devoted to "Industrial Heating Requirements," "Types of Industrial Organization," "Industrial Cost Finding and Practice," "Industrial Plant Surveys," "Gas in Relation to Competitive Fuels," "Report Writing," "Business Letters," "Systematizing Industrial Gas Sales Work," "What a Salesman Should Know About Advertising." All of these sessions will be conducted by authorities in their particular fields.

Due to the fact that the best talent available has been obtained for this course, a nominal fee will be required of those attending the course.

Bring Back the Sunshine
Use GAS The Smokeless Fuel
The Laclede Gas Light Company
SMOKE MUST GO
Heat with Gas The Smokeless fuel

*Billboards carry the story of the smoke nuisance*

# Gas Is Sweeping Away St. Louis Smoke

## A Unified Plan of Action on the Part of Citizens Is Effective in Abolishment of Smoke

By VINCENT M. CARROLL

[Director of Public Relations, The Laclede Gas Light Co., St. Louis, Mo.

OTHER gas men may be interested in knowing how and to what extent The Laclede Gas Light Company is participating in the effort now being made in St. Louis to restore to our citizens at least a part of the sunshine and purity of air of which for many years they have been deprived by that toxin of waste—smoke.

After having picked futilely at the difficult problem for several years in a small, hopeless way, civic enterprise finally was aroused to decisive and united action. Various random agencies were consolidated into a closely knit Citizens Smoke Abatement League. A smoke abatement engineer, Osborn H. Monett, of Chicago, was employed and a fund of $250,000 pledged to conduct a three-year campaign to clear "the pathway to the skies."

Throughout all this evolution the Laclede has been active in an organization way through its officials and friends. During the more definite developments of recent months it has had two members on the board of directors of the League, George B. Evans, President of the Laclede Gas Light Company, and the writer. Mr. Evans also is a member of the executive committee, and the writer has directed the publicity of the League for more than a year.

Then when the campaign for funds was initiated, the Laclede led the list with a contribution of $5000 a year for each of three years, the largest single gift to the chest.

Besides this direct enrollment in the ranks of the "Smoke Must Go" movement, the gas company has contributed enfilading support from the flanks of the field of action through its advertising.

Of course this advertising has not been altogether philanthropic, as it has formed one part of the drive for house heating business which John J. Burns, commercial superintendent of the La-

**Making the Clouds of Smoke Roll By**

***Gas Will Sweep St. Louis Skies Clean***

SMOKE DISFIGURES a city, is unhealthful, and costs each citizen many dollars a year. · · The use of gas in place of crude, old-fashioned fuels will sweep St. Louis skies clean. For gas, the super fuel, burns without smoke or soot. There is no waste. It gives heat that can be regulated accurately, a mighty advantage in manufacturing. · · You pay for Gas after you use it. It takes no investment, storage, handling, hauling of ashes. · · Manufacturers who heat and reshade metals, who operate ceramic kilns, japanning ovens, enameling furnaces, and bakers and food packers, all are finding gas highly profitable. It turns out a better product in less time. It costs nothing to investigate.

*Telephone CEntral 3800, Industrial Division, and ask for one of our engineers*

**The LACLEDE Gas Light Co.**
OLIVE AT ELEVENTH

*Industrial smoke is also attacked*

clede, has been conducting for about two years.

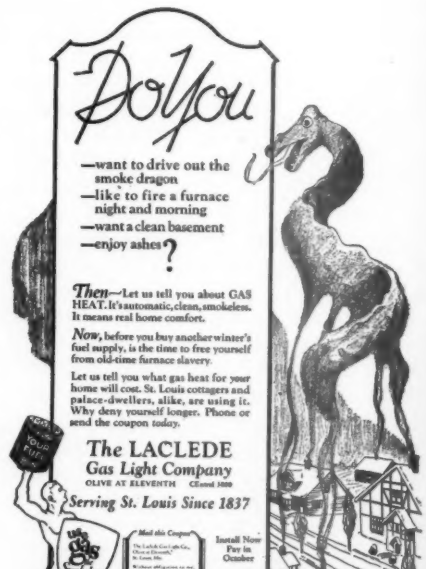
The first of the series of newspaper advertisements was built around a cartoon which had appeared in the St. Louis *Times*, picturing the horror and waste of the smoke nuisance. The next was based upon the effort of a subdivision promoter to have as much gas heating as possible in his new residence section adjoining one of the St. Louis parks. In this advertisement we argued "Make St. Louis a Smokeless City—Burn Gas," reproducing a letter written to the subdivision owner, and quoting from a speech by Smoke Engineer Monett in which gas had been labelled as the ideal fuel. "Gas to Help Save Parks" was the headline.

Third in the campaign came one headlined, "Above the smoke the sun still shines," the illustration showing a pall of apartment and residence smoke, effectively shutting off most of the sunlight. Of course the gospel of gas, the clean fuel, followed.

Stepping aside from residence smoke to the field of industry, the next advertisement showed how "Gas will sweep St. Louis skies clean," making the clouds of smoke roll by, with a factory scene being swept with broom by a mythical giant.

This leads to the "Smoke Dragon" advertisement, which has received recent gas magazine comment.

The dragon advertisement grew out of billboard copy which had been used during December and January, when the smoke campaign was getting under serious way, and which later was used as the background for a house heating window display. Previously, another billboard theme has been, "Bring back the sunshine—Burn Gas, the Smokeless Fuel."


Do You
—want to drive out the smoke dragon
—like to fire a furnace night and morning
—want a clean basement
—enjoy ashes?
Then—Let us tell you about GAS HEAT. It's automatic, clean, smokeless. It means real home comfort.
Now, before you buy another winter's fuel supply, is the time to free yourself from old-time furnace slavery.
Let us tell you what gas heat for your home will cost. St. Louis cottagers and palace-dwellers, alike, are using it. Why deny yourself longer. Phone or send the coupon today.
The LACLEDE
Gas Light Company
OLIVE AT ELEVENTH CEntral 3800
Serving St. Louis Since 1837
Mail this Coupon
Install Now Pay in October

*The smoke demon must go—out*

Other help in this general campaign came through reprint in St. Louis dailies of a story sent to them by this office, taken from *Gas Progress,* the semi-monthly news sheet of the American Gas Association, quoting the smoke abatement engineer of Nashille, Tenn. (a St. Louisian), on gas and coke as the remedy for smoke.

And so, although on a still cold day there yet remains a bit of smoke in busy St. Louis, its citizens are meeting the problem aggressively, and their gas company is helping.

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*It is of particular interest to note the following paragraphs, taken from a recent issue of the N. Y. Sun.—Editor.*

Of all American cities it is St. Louis that has under way the most distinctive anti-smoke campaign in the country. Physicians declared smoke made St. Louis "the home of sinus trouble." Even 15,000 orchids had to leave town—the rare collection in Shaw's Gardens was so affected by the smoke that it had to be moved to the country. It cost three times as much to redecorate the Statler Hotel in St. Louis, with 650 rooms, as the Pennsylvania Hotel in New York, with 2,200 rooms. With an estimated annual soot crop of 47,275 tons—that is, 1,098 carloads or 755 tons per square mile—smoke cost the city of St. Louis more than $15,000,000 each year, according to detailed estimates.

Then in March last year eighteen organizations combined to fight the smoke nuisance. Conferences were held and citizens brought together in the common cause of smoke abatement. House-to-house canvasses were conducted and lists of smoke violators compiled. Seventy-five per cent of the flues in St. Louis were found inadequate for proper combustion.

A school for giving instruction in the proper way to fire a furnace was established. Children in the seventh, eighth, and ninth grades were taught how to keep the home fires burning properly.

Above the smoke the sun still shines
Sunshine is priceless. Light, health and happiness go hand in hand. The smoke nuisance is a perpetual robber. Day after day, fouling the air and dimming the sunshine, it takes heavy toll from St. Louis.
The cost of soft coal is comparatively low. The cost of *burning* soft coal is appallingly high. Because of soft coal smoke and soot, St. Louis pays millions yearly in abnormally large bills for cleaning, painting, papering and laundering.
Each year smoke-polluted air causes millions of dollars of deterioration in property. Smoking chimneys are signals of danger, discomfort, dirt, waste and loss. Breathing soot-filled air is not conducive to health and long life.
Burn GAS, the CLEAN Fuel
Help make St. Louis a smokeless city —by burning GAS, the ideal fuel for home-heating and industrial uses. No soot, smoke, ashes or cinders. Its control is as easy and accurate as setting the hands of your watch. Always ready. You pay only for what you use —after you use it.
Call and let us show you letters from St. Louis people who have used gas heat for years and who tell of its superiority and economy. Our engineers will gladly supply you with fullest information regarding gas heat for home and industrial uses.
The Laclede Gas Light Company
Olive at Eleventh • • Central 3900

*Forceful newspaper advertising*

Of course there was a Smoke Abatement Week, and everybody who stopped could read the "Smoke Demon" poster, with a dragon spouting smoke and bearing down upon a brave little group of St. Louisians who carried a banner bearing the legend,

"Watch St. Louis grow
When smoke is made to go."

St. Louis has found that it pays both in brighter skies and dollars to eliminate smoke. Here are a few examples of the savings effected by St. Louis firms, as reported to the Citizens' Smoke Abatement League:

F. W. Woolworth & Co.—Fuel cost cut 40 per cent by installation of improved furnace equipment, which was paid for by the saving in three and a half months.

Cupples Tire Company—Saving of $7,000 on fuel and labor a year effected

by stokers costing $3,200 and eliminating smoke.

Broadway Laundry—Forty-nine per cent return on investment in new equipment costing $2,200, with fuel saving of $90 a month.

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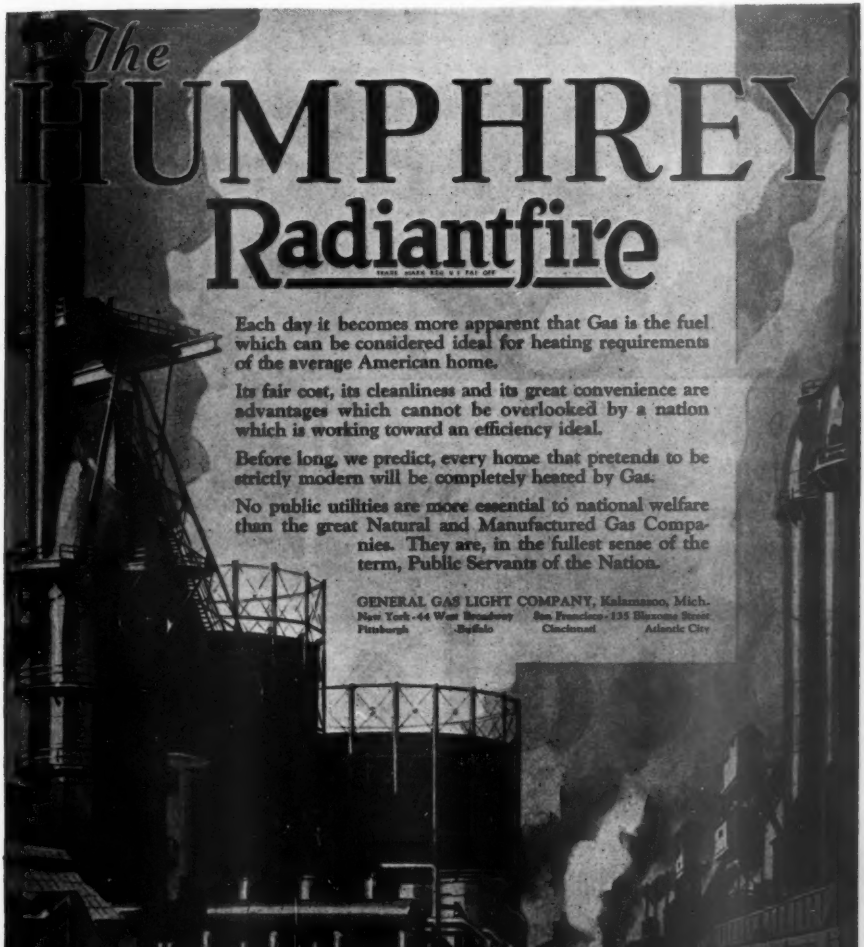

The
HUMPHREY
Radiantfire
Each day it becomes more apparent that Gas is the fuel which can be considered ideal for heating requirements of the average American home.
Its fair cost, its cleanliness and its great convenience are advantages which cannot be overlooked by a nation which is working toward an efficiency ideal.
Before long, we predict, every home that pretends to be strictly modern will be completely heated by Gas.
No public utilities are more essential to national welfare than the great Natural and Manufactured Gas Companies. They are, in the fullest sense of the term, Public Servants of the Nation.
GENERAL GAS LIGHT COMPANY, Kalamazoo, Mich.
New York - 44 West Broadway
San Francisco - 135 Sansome Street
Pittsburgh
Buffalo
Cincinnati
Atlantic City

*It pays to advertise your industry—from the Saturday Evening Post*

# Why Is It Desirable to Eliminate Straight Meter or Uniform Rates?

From "BETTER FORMS OF RATES FOR GAS"

FOR the benefit of customer, community and company, who are alike interested in seeing that the best possible service is rendered at the lowest price consistent with that service. Some of the following reasons may seem at first to be in favor of the company, but a closer examination will show that each will operate ultimately to the benefit of the customer as well as the community:

1. *As a protection.* Extended experience with rates based on average cost for all customers clearly shows that it is becoming more and more desirable that gas rates take into account the cost of service, not only in the aggregate and as to each class of customers, but to individual types of customers.

With the introduction of electricity for commercial uses, the gas business entered a new era of competition, marked at first by the struggle for lighting supremacy. It is in no such circumscribed field that gas faces competition today. For the fuel requirements of homes, factories and industries, there are already aggressive and eager contestants in coal, coke, oil and electricity. In practically every application of gas, there are competitors; and it is becoming more and more necessary to meet that practical condition in the planning of improved rate schedules.

The change of habits of the domestic customers, as evidenced by the extraordinary growth of the business of the small restaurant, the laundry, the baker and the delicatessen store, has brought with it a decrease in the household consumption of gas. Where a decrease in quantity has occurred, the resulting decrease in revenue has not, owing principally to the forms of rates in effect, been accompanied by any proportional decrease in the cost to the company of furnishing the service. The consumption of gas has been further affected by the use of the many portable electrical appliances and a condition is developing whereby more and more customers are not using sufficient gas to cover the actual cost of serving them. If this is permitted to continue and extend, without corrective measures designed to adapt rate schedules to meet these new conditions and to encourage new uses which increase consumption and improve the ratio between capacity and average daily output, it will be necessary to raise rates to all customers.

2. *As a correction.* Many companies serve from 30 to 80 per cent of their customers at a loss, which loss, if the company is to receive a fair return, must be

### BETTER FORMS OF RATES

**THE article on this page is from the booklet, "Better Forms of Rates for Gas," recently prepared by the Committee on Rate Fundamentals, William L. Ransom, Chairman. The text, which is a discussion of rate-making based on allocated costs, was approved and adopted by the Executive Board of the Association at the 1927 spring conference.**

**Copies of the booklet can be had by writing to the Association, or to the Editor of the MONTHLY.**

**A listing of the chapter headings is strong testimony to the valuable content of the pamphlet. Among the chapters are these: Upon what cost elements should rate structures be based? To what extent are these cost allocation principles expressed in actual rate-making practice? How is demand determined? In what ways may rates embodying allocated costs be adopted in rate-making? What have been the results obtained by installing rates embodying cost allocation principles? What has been the effect of the fixed charge principle when applied to electric rates for residence service? Etc. Etc.**

made up by additional charges to the remaining customers, and the resulting rates are often too high to meet competition.

3. *As an inducement.* The industry desires that rates be such as to induce additional use of its service by each customer, through his knowledge that he can afford to use additional gas at relatively low additional cost.

4. *As an economy.* The industry desires to keep gas moving at all times through the mains at as nearly as possible the maximum rate of flow; that is, at the highest possible load factor, and thus utilize its entire investment, to the maximum extent, in the interest of distributing the fixed and standby cost over the largest practicable output, both per customer and in total. Economy in cost results from keeping plant, distributing systems and labor uniformly occupied. Thus a large, steady use by the customer results both in gain to the company and lower unit cost to the customer.

In situations involving long-distance transmission of natural gas a favorable load factor is of extreme importance, because the amount of the required investment in transmission facilities over the entire distance is determined by the maximum rate of flow.

5. *As an attraction to additional industrial gas business.* In industrial processes gas is used through the working

(Continued on page 506)

# Recommended N. E. Regional Sales Policies

## Adopted at the Third New England Gas Sales Conference; Sponsored Jointly by the A. G. A. and N. E. G. A.

THE following resolutions constitute the summary of the major points covered by the addresses given at the Third New England Gas Sales Conference at New London, June 3-4 and were unanimously approved at the final session of the Conference.

At that time a resolution was passed requesting the printing and distribution of the recommended sales policies to all present at the Conference in order that they might utilize the recommendations in any possible way for the advancement of the industry and increase of gas sales locally.

For maximum sales results, gas companies' sales policies should comprehend some form of cooperative merchandising.

The more favorable condition of the general public mind toward the purchase and use of gas-burning equipment today, even when compared with recent years, and the progress made in the study of rate fundamentals and rate structures by eminent men, points to the urgent need for prompt action in establishing rates to distribute more equitably the fixed charges of service, thereby reducing the unit charge for the commodity which will, in turn, encourage the greater use of gas for water heating, auxiliary heating, incineration, refrigeration, etc.

Too much emphasis cannot be placed upon the importance of establishing a rate structure that can be easily interpreted by both the gas company personnel and the customer.

Compensation to sales representatives should include the element of a basic salary, an added premium based upon the appliances sold and a premium based upon the added load.

The apparent lack of any uniform fundamental sales policy of the industry in New England makes it imperative that the District representative plan, or some similar method be given serious consideration on the basis of establishing a definite sales policy and bringing about greater continuity of sales efforts by gas companies.

# Future of Gas Industry Is Secure

## Prominent Statistician Feels That Utility Has Set Remarkable Record from Investor's Viewpoint

By JOHN MOODY

In Moody's Investor's Service for June 30, 1927

THE gas industry, which was the earliest of the utility services to be developed except water, has established an excellent record from the investor's point of view, although it has been so far somewhat overshadowed, in the eyes of the public, by the growth of the electric power and light business.

Expansion of the industry has been rapid and uninterrupted for more than two decades—a remarkable accomplishment in view of the readjustment from an illuminating to a heating service which has taken place during that time consequent upon the development of electricity. The sales of manufactured gas, as reported by the American Gas Association, amounted, in 1926, to 459,326 million cu.ft. as compared with 421,400 in 1925, 405,200 in 1924, 384,722 in 1923 and 178,229 in 1912.

A feature of this expansion was the constant growth of the consumption of gas for industrial purposes and the successful efforts of gas companies in finding new and diversified uses for their product. Aggregate net operating earnings of eight leading gas companies amounted in 1926 to $33,029,000 as compared with $25,109,000 in 1925, $24,822,000 in 1924, $25,880,000 in 1923 and $25,213,000 in 1922.

Thus, the gain in 1926 was 31.54 per cent, due chiefly to a notable increase in earnings of the Consolidated Gas Co. of New York and the Brooklyn Union Gas Co. At the same time, the ratio of operating net to gross showed a substantial improvement, rising from 21.43 per cent in 1925 to 24.86 per cent in 1926, a record figure for recent years.

The above results appear still more encouraging in the light of the slow, but consistent, decline in the average of retail prices for gas. This average, as compiled by the Bureau of Labor, stood at $1.22 per 1,000 cu.ft. at the end of 1926, against $1.23 at the end of 1925 and $1.30 at the end of 1921.

In view of these accomplishments, the managerial ability, and the stability of earnings so convincingly displayed by the gas manufacturing companies, one cannot help remaining fully confident.


*Building Forecast for 1927...*
*-Residential-*

This award-winning home with its graceful Ionic balcony won a prize in the American Gas Association competition for architects. It has gas outlets for: Central Heating (Warm air, steam or hot water); 7 Fireplace Heaters; 4 Portable Stoves; Wall Heater; Incinerator; Laundry Stove, Stove and Ironing Machine

FOR one thing, well-built Dallas homes of 1927 will have a certain new piece of equipment to give another fine touch and safeguard to housekeeping—a gas-fired incinerator that burns all garbage safely and quickly.

These first-class houses will enjoy a flexible heating schedule—the furnace full blast ahead from basement to attic, or a fire here and there in fireplace, radiator or portable stove, according to the weather. They will have a flexible fuel to meet changeable weathers at the turn of a valve.

Furthermore, all the gas equipment, from drawing-room to laundry, can bear the Blue Star emblem, showing that it has been tested and approved in the laboratory of the American Gas Association. This means that the household can get the full heat value of its fuel, wherever heat is needed.

THE DALLAS GAS COMPANY

*Dispensers of Natural Gas*

**WITH active merchandising of quality (Blue Star Laboratory Approved) appliances for the home, and the promotion of the industrial gas business, there is every reason to believe that Mr. Moody's prophecy about the future is true. The gas refrigerator and other new domestic appliances and the ever-increasing uses of gas in factories will do much to increase sales.**

# Editorial

## *Entire Gas Industry Now United*

SINCE the consolidation of the American Gas Association and the Natural Gas Association of America, as announced on this page by the Presidents, is now complete, it becomes the job of all concerned in the future of the industry to make it a consolidation in fact and in interest as well as in name.

We shall fail in the purpose of our leaders if we continue to think of manufactured gas interests and of natural gas interests as something separate and apart. There is no problem in the manufactured gas business in which the natural gas man is not interested, and this goes too for production. There is scarcely a problem in the natural gas business in which the manufactured gas man is not interested. It is essential now to think and speak and write in terms of common interest.

In the future councils of the Sections of the Association, the deliberations of officers and committeemen will not be as manufactured gas representatives nor as natural gas representatives, but as gas men working on equal terms for the common aim of the industry's advancement. This is equally and irrefutably true in the Accounting Section, Commercial Section, Publicity and Advertising Section, Industrial Gas Section, and the Technical Section. In fact, if not in name for the present, the same statement applies with equal truth in the Manufacturers' Section.

The Natural Gas Department has a great deal to give in every part of our joint endeavors to their brethren who have been manufacturing and selling artificial gas. To some extent there has, of course, been duplication of effort, which now exists no longer, but in methods and in the spirit of approach there are valuable contributions which each may make to the common cause.

As nothing succeeds like success, nothing cooperates quite as well as cooperation, and in light of the spirit in which the two associations have joined their hands and their names and pledged their efforts to the good of the industry as a whole, it will be found increasingly easier to perfect the consolidation of spirit and purpose which led to the determination of our leaders to unite our efforts in a common purpose.

By ALEXANDER FORWARD,
*Managing Director.*

**To the Gas Industry of America:**

**We take pleasure in announcing that, all essential details being complete, the Natural Gas Association of America and the American Gas Association are amalgamated into a single body under the name of the American Gas Association, Inc., as of August 1, 1927.**

**All elements of the gas industry in North America, manufactured and natural, are now one body united for the advancement of the industry and the development of its usefulness to the people whom it serves.**

**Alexander B. Macbeth,**
**President, American Gas Ass'n**
**N. C. McGowen,**
**President, Natural Gas Ass'n of America**

# Selling and Installing Gas Refrigerators

## A Brief Outline of Actual Experience Gained in the Promotion of This New Domestic Appliance

By N. T. SELLMAN
Engineer of Utilization, Consolidated Gas Co. of New York

© Blank & Stoller
*N. T. Sellman*

EVERY new application of a product or even the development of a new article will present problems which at first seem difficult of solving. Sometimes these problems are so numerous that unless the people promoting its development are tireless and refuse to be discouraged, failure or further delay, with consequent loss in prestige, is imminent. From talk that I have heard from time to time, some gas men are apparently willing to permit this condition to arise with refrigeration, some possibly doing it with the thought in mind that they will let someone else pave the way and take the burden; others are just easily discouraged and allow the last speaker to sway their viewpoint as to the merits of the article.

Most gas companies are now experiencing their first problems in selling, installing, and servicing gas-fired refrigerators, and undoubtedly a general discussion will be of greater value at this particular time than any one man's experience. No matter what particular refrigerating machine a company may be investigating or merchandising, the problems involved are sufficiently similar that an exchange of experiences must be of value.

All gas-heated machines which have passed the experimental stage are of the absorption type, and are either intermittent or continuous in their evaporating effect. Present development indicates that the intermittent refrigerating unit is easily adaptable for application to well-constructed boxes of any make, and is also capable of development into units of large capacity. Consequently, this type of unit may lead the way for entering the field of commercial refrigeration. The continuous type of refrigerator is compact, simple, free from valves and moving parts, and requires but a small heat input—and is consequently suitable for installation within a box or cabinet designed for the purpose. The future development of this type unit should also extend its uses into many commercial applications. Units of much larger capacity than we are familiar with in this country have been developed abroad. To me it appears that any refrigerating unit combined with an icebox or cabinet which may be developed and sold on a production basis will extend the market for the continuous refrigerating unit.

The selling and installation problems differ in some respects for the two types, even though certain fundamental considerations are common to both. Energetic selling, neat installation work, and efficient servicing can only be realized when the organizations for these various purposes are thoroughly trained and convinced that the product with which they are dealing is as good or better than any other similar product.

Many gas companies have been very successful in merchandising, installing, and servicing such appliances as gas ranges, room heaters, tank water heaters, and other non-automatic appliances. But it does not necessarily follow that equal success is obtained in selling automatic and higher priced appliances.

Presented at N. Y. Regional Sales Conf.

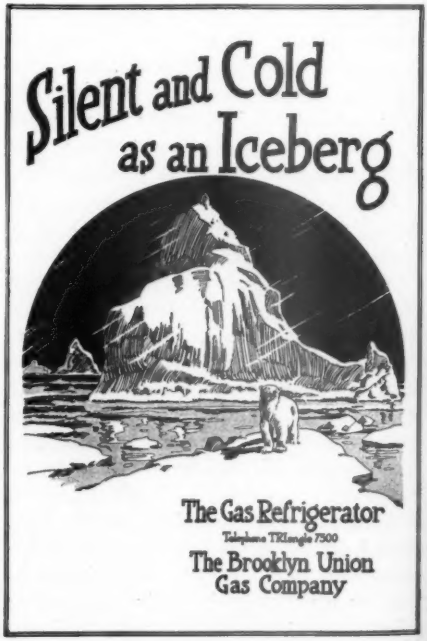
ICE
without
machinery
no motor
a flame
CONSOL
IDATED
GAS · CO.
A tiny gas flame and a little water are all you need to make ICE in the silent Electrolux-Servel Refrigerator Automatic.... but no machinery! Write for Booklet
Consolidated Gas Company.

*Two interesting "small space" advertisements extolling gas refrigeration*

An important consideration at this time is to what extent can regular domestic gas appliance salesmen and fitters be used for the successful merchandising of gas-fired refrigeration. The only gas appliances with which we have had some experience that present a somewhat similar problem are automatic house heating boilers and water heaters. In the majority of gas companies, it has already developed that special salesmen and skilled service men are required. The sale and installation of electric refrigerators has, in most cases, been limited to men selected and trained for that one specific purpose.

The gas refrigerator has numerous advantages over electric refrigeration which should aid sales, but there are installation difficulties which counteract the advantages sufficiently to make our sales problems equally as difficult as the selling of electric refrigeration. We must all admit that less mistakes will be made with intelligent and well-trained sales and service men than if large untrained groups are used. It appears to me that it is particularly important at this time, when we are being so carefully watched by competitors as well as prospective customers, that every effort should be made to reduce mistakes to a minimum. My desire to be careful must, of course, be tempered so that caution does not hamper merchandising efforts unduly.

Advertising, canvassing and even the securing of orders for stock refrigerators may be carried on as in any normal gas appliance merchandising, provided that a competent man inspects the premises before the box is delivered, and that the final execution of the order be subject to such an inspection. There are numerous considerations which may prevent or make an installation inadvisable. For example: It may be impossible to deliver the box into the space selected because of small stairways, doors and windows, or the proposed location of the box may be too cold for good refrigerating service, or there may be danger of freeze-up on gas and water piping. When this inspection is made, all conditions relating to the




*Who said, "Not so hot"?*

final installation should be determined. Measurements should be taken for water, gas and drain connections, and a complete list of the material required should be prepared for the shop or plumber who will make the final installation.

The sale of intermittent refrigerating units, for installation in existing iceboxes, requires very careful consideration as to the cubical contents of the box, the insulation and any other factors which might affect the heat losses of the box. In this type of unit an electrical connection may also be required for the control mechanism and consideration should be given to the correct type of motor to be supplied and the necessary wiring material. The unit should have sufficient capacity to maintain a box temperature of forty degrees for maximum summer temperatures of both air and water.

The sale of refrigerating units, either in quantity or for special purposes, deviating from those provided for by stock appliances, require considerable preliminary planning, and an order should not be accepted without careful study. Before a quotation can be made, it is necessary to evaluate all the work to be done, by whom it will be done and to coordinate the gas company's share of responsibilities with that of the plumber providing the outlets, the box manufacturer furnishing the cabinet, and the manufacturer of the refrigerating unit.

If there are no objections to accepting the order, a definite appointment should be made for the use of delivery and installation. Either prior to or with the delivery of the box or unit, all materials should be on hand for making the necessary connections. The work of connecting the refrigerating unit should proceed in the order which will permit the unit being put into operation at the earliest moment. For example: On the Electrolux-Servel unit, the gas heat can be applied to advantage about twenty minutes prior to the need for cooling water, thus starting actual refrigeration a few minutes after the cooling water is turned on. The men making the installation should only remain long enough to make sure that the unit is refrigerating, and that the gas flame is of proper size and adjustment. Regulation of box temperature, with any necessary thermostat adjustment, should be the duty of a service man on a visit the following day. Cooling water regulation should be left approximately correct by the installation men, but the final adjustments can best be taken care of on the second day's inspection.

The customer should be instructed by the service man in defrosting, which includes directions in turning off gas and re-lighting burner. Some customers may also be instructed in the other adjustments, such as thermostat and water valve. This, however, should not be general practice, and will depend upon the mechanical inclinations of the customer. It is well not to volunteer detail information until people have become accustomed to the refrigerator, the newness has worn off and a mature understanding of the unit has become probable.

Service men should be instructed to work and not talk. The necessary adjustments should be made in logical routine without waiting for box temperatures to settle. If in doubt, it is better to go back again than to waste the time it will take a box at 50 degrees to reach equilibrium at 40 degrees. The most satisfactory servicing can only be obtained if the same men attends to repeat calls. The supervisor should examine the work tickets and demand a complete explanation about any installation where more than two or three calls have been required. A record should be kept of all installations, showing factory number of box and unit, date of installation, and all subsequent calls. Cost of material, trucking, and labor should be available, so that more accurate selling costs can be arrived at in the near future. Such figures will also help in establishing our

ultimate guarantee and service charges.

The newness of refrigeration makes it desirable to examine or test carefully all units before they are delivered to customers. This is recommended even though the manufacturer in all probability goes through the same tests. A test should demonstrate that the unit has its approximate rated capacity and that there are no leaks or construction defects. The regulators should be adjusted for average conditions of gas and water pressure.

No gas-consuming appliance has ever received the general praise and unsolicited interest that refrigeration has produced. Most sales have been the result of favorable comment of a satisfied refrigerator owner to a friend. Letters of introduction have been written, without request, advising friends to investigate, and with careful watching the cycle should continuously grow larger. Never in my experience have people expressed themselves about a gas appliance in such strong terms of commendation. Never before have customers purposely visited my office to inform me that the refrigerator is wonderful. Under these circumstances, is it advisable for a gas company that is merchandising gas appliances to turn this responsibility over to a dealer? The good will that this appliance can bring us may readily be used to advantage in selling other gas applications in the home.

The combination gas and electric company, which sells electric refrigeration, will undoubtedly be criticised for not selling the gas-operated refrigerator. People will no doubt infer that the reason for this policy lies in the higher revenue secured by electric refrigeration. In most localities the gas refrigerator will be cheaper to operate, and this combined with the features of safety, silence, and simplicity will ultimately control public opinion. In the private home, every owner of a gas-operated refrigerator is a prospect for gas heating and any other purpose where heat is required.

## Koppers Co. Provides for Scholarship at Johns Hopkins

THROUGH H. B. Rust, President, The Koppers Company, of Pittsburgh, Pa., has given a scholarship of $450 a year for a period of four years to the Gas Engineering Department of the Johns Hopkins University, according to Wilbert J. Huff, Professor of Gas Engineering at the University.

The scholarship is to be awarded to a deserving student in the Department, and will be given preferably to advanced and graduate students. Applications for the scholarship may be made by anyone interested.

This is the fourth new scholarship to be given to the Department of Gas Engineering this year. Two scholarships were provided by the Consolidated Gas Company of New York, N. Y., and one was given by the Washington Gas Light Company, Washington, D. C.

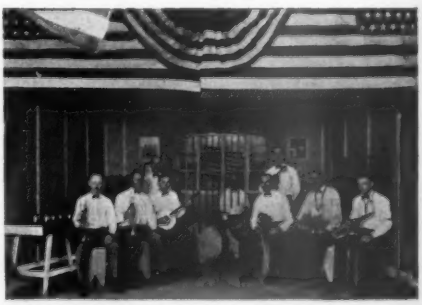
## Brooklyn's Syncopators

PICTURED here is The Brooklyn Union Gas Company orchestra, composed entirely of employees of the company. It is under the leadership of Adolph Schoneberger and includes both vocal and instrumental soloists.

The orchestra has played at various company entertainments and the musicians have proved themselves artists of much ability.

In the centre is a rather interesting instrument which is called the "Gas House Chimes." It is a set of chimes made from odds and ends of ¾" gas pipe picked up around the shop. As played by Mr. Schoneberger, it produces beautiful melodies.

The musicians from left to right are: J. McGovern, first cornet; J. Shay, second cornet; J. Asher, piano; E. Larberg, banjo; G. Kingsley, drums; M. Klett, violin; A. Schoneberger, violin; R. Zingerman, E-flat saxophone; O. Teasdale, E-flat and soprano saxophones.



# Master Plumbers Approve Range Boiler Tapping Recommendation

WHAT is considered to be a development of the greatest interest and importance to the gas industry now seems definitely attainable, as a result of action taken at the recent annual convention of the National Association of Master Plumbers at Minneapolis, Minn., June 20-24.

The following resolution, passed unanimously, will be influential in presenting the case further before the Range Boiler Committee, Division of Simplified Practice, Department of Commerce, in September: "That the National Association of Master Plumbers in convention assembled approve the suggested additional side tappings for range boiler, *viz.:* One 18" and one 24" from the bottom edge of the boiler shell and in line with the present side tappings."

The Division of Simplified Practice has developed, in conjunction with the manufacturers, the standard range boiler at present in use. At the 1923 meeting of a committee of the leading range and boiler manufacturers and representatives from the gas industry, it was decided to have two tappings in the side of the range boiler shell, one six inches from the top and one six inches from the bottom, for the use of a heating unit, whether gas or other fuel.

After several years' use of range boilers built in accordance with these specifications, a meeting was called of the committee in May. This was of particular significance to the gas industry, because it has been felt by many gas men that the two tappings provided under the old standards were neither the best possible location nor did they provide for the eventuality of automatic hot water service.

The range boiler manufacturers present decided after long deliberations not to change the present standards, because of the additional expense involved. They felt that this expense was not justified unless the plumbing trade should definitely call for range boilers equipped with additional tappings. R. T. Rock, representing the National Association of Master Plumbers, stated that in his opinion the master plumbers were not ready for action supporting the gas industry's proposals at this time.

However, the members of the Committee on Range Boiler Simplification were so impressed with the advantages of the additional tappings that they decided to hold another meeting of the committee in September (either Pittsburgh or Chicago), at which time they would review the present status of the specifications and consider any proposals which the master plumbers might make. The meeting was set in September to provide opportunity for the gas industry to present their suggestions to the master plumbers at their June convention.

In order to secure the most favorable reception for the proposed plans by the National Association of Master Plumbers at the June convention, it was felt advisable to urge those gas companies located in communities in which the most favorable relations were known to exist between gas companies and the local master plumbers to present the industry's suggestions before the latter bodies.

The American Gas Association proposed the addition of two more one-inch tappings on all range boilers to be located respectively at 18" and 24" from the bottom edge of the boiler shell, and in line with the present side tappings.

It is impossible to cover in detail all of the reasons that make these additional tappings advisable. However, from the gas company standpoint the most essential ones are as follows:

The home owner has several possible

methods of connecting water heating appliances to his range boiler even when only two side tappings are provided. He may use an indirect unit attached to the central heating plant, a laundry heater, or a coal-fired kitchen range connected to the two side tappings provided on existing range boiler. Once this is done it becomes very difficult, if not impossible, for the gas company at any future date to sell or to connect a gas-fired water heater to the boiler.

Furthermore, the present construction of range boilers is such that it is difficult to break existing piping in order to insert additional equipment without running the risk of ruining the entire range boiler. Thus there is a tendency to leave well enough alone and not make any new connections unless absolutely necessary. This means that if a gas unit were subsequently sold it would have to be connected to the range boiler in the so-called unfavorable location.

The second method which a home owner may adopt is to buy, initially, a gas-fired water heater which would then be connected to the two side tappings provided. This will give him a satisfactory, quick and economical hot water supply, but this will not permit him to install any type of automatic water heating service. The connection of the two side tappings 6 inches from the top and bottom of the boiler is ideal for manually controlled water heaters, and enables the user to secure a moderate supply of hot water most rapidly. Suppose on the other hand, that the home owner wishes to secure automatic hot water service, whether by the addition of an indirect heating system as previously mentioned, or by the adoption of a thermostatically controlled gas-fired system. In either event he is at a loss, because no tappings are available to give the automatic hot water supply a favorable position, or to insert the thermostat if that be desired. To be sure, by the use of special couplings a hole may be cut in the shell of the range boiler and additional tappings provided, but the cost of doing this is approximately $2.75 to $3.50, while the cost of equipping a range boiler with extra tappings at the time of its manufacture would be between twenty cents and fifty cents.

The home owner benefits in several distinct ways by having extra tappings. First, he secures the cheapest possible connections for his equipment. Second, he can secure manual gas-fired hot water supply for the summer months, coupled with automatic heating service through indirect heaters in the winter months. Third, he may secure at any time he desires complete automatic gas-fired water service by lowering the top connection to one of the middle tappings, and installing a thermostat. In other words, one of the great future developments of the domestic gas load hinges on supplying to the public adequate tappings in the range boilers, and to do this it is most important that every possible pressure be brought to bear on the range boiler manufacturers before the next meeting of that committee.

The action of the National Association of Master Plumbers, in approving unanimously the recommendations for two additional tappings will enable the industry to present the matter in the most favorable manner possible at the September meeting of the range boiler committee.

## To the Younger Generation

(Continued from page 453)

to make reservations early. Never before have the pre-convention indications pointed to a meeting as large as the Ninth Annual Convention will be. Every member should make reservations at Chicago as soon as possible, in order to avoid the last minute rush.

The business of the convention will reflect the trend of the industry and the thought of the leaders, making it imperative that the younger men attend, that they may be better equipped to do their best in their present jobs, and learn the problems they must face when they assume tomorrow's leadership.

# 1927 Publicity Improves Public Relations

## Radio Is Used to Warn Customers of Break in Main in Suburbs of Philadelphia

ONE of the most peculiar accidents in the history of the Philadelphia Gas Works occurred on June 7, when between 40,000 and 50,000 persons in the Roxborough-Manayunk section of Philadelphia were without gas from 10 to 18 hours.

Roxborough and Manayunk are famous for steep, rocky hills—otherwise the effect of this accident would not have been so far reaching. A city contractor, constructing a sewer inlet at Roxborough Ave. and Tower Street, found it necessary to blast out some solid rock. Previously, an excavation about 30 ft. long, 15 ft. wide, and 6 ft. deep had been made near the point of blast, which exposed a 6-in. gas main and a 6-in. water main running parallel down Roxborough Ave., about five ft. apart, the gas main being about five ft. from the point of blast. Whether the charge was too heavy or whether proper precautions to protect the exposed pipes were not taken has not been ascertained, but the result of the explosion was the breaking of both mains. The excavation quickly flooded, and the 6-in. gas main, which connected to the 20-in. feeder line to the district, several blocks away and about 100 feet lower in eleva-

*Picture taken day after blast explosion shows the broken section of water main replaced and the broken gas main temporarily bridged with a double by-pass*

tion, acted like the outlet of a funnel and drained the water from the excavation into the 20-in. main. Before the water could be shut off, enough of it had run in the 20-in. pipe to seal it off at a low point, thus cutting off the gas supply to the district.

The explosion occurred shortly after 3 p.m. and before 5 o'clock, W. H. Gartley, chief engineer of the Philadelphia Gas Works, and Walton Forstall, engineer of distribution, had marshalled their supervisory forces and approximately three hundred men from all sections of the city were on the job making preparations to re-gas the isolated area.

Mr. Gartley decided to take no chances and issued instructions that each of the 9000 meters should be turned off before the mains were pumped. This was done by about 9:00 p.m., when the pumping was started. In order to avoid an explosive mixture getting into the mains, due to air being sucked in through open street lamp burners, which are of the automatic type, or through the open burners of consumers' appliances, a slight gas pressure was kept on the main as the water was being pumped out. Approximately 7000 gallons of water were removed from the main system, before the work of turning on could be started.

It was then decided that it would be impossible to make the turn-ons before midnight, as at first appeared possible, and rather than disturb consumers late in the night, this work was postponed until early morning. Restaurants, bakeries and other large consumers were turned on first, and before noon every consumer had gas service, each house or building having been inspected to see that no gas burners were open before the gas was turned on.

The city police department was notified immediately to watch out for asphyxiation cases, and members of the U. G. I. Safety Division were continuously on the job with resuscitating apparatus, ready for any emergency, but, fortunately, their services were not required.

Through the courtesy of Radio Stations WFI, WIP and WOO, the U. G. I. Publicity Department was able early in the evening to advise the consumers what had happened and what precautions to take. The stations kindly broadcast the following message, which is probably the first of its kind ever sent over the air:

> Due to a break in a water main at about 3:00 p.m. today, 9000 gas meters in Manayunk and Roxborough are out of service, water having flooded the gas mains.
>
> Gas consumers in that district are requested by The U. G. I. Co. immediately upon receipt of this notice to see that all gas-consuming appliances are turned off. U. G. I. men from all sections of the city are working to clear the mains. A U. G. I. man will visit each house before gas can be turned on. This will be done this evening, and U. G. I. hopes to restore gas service before midnight.

Those consumers who did not have receiving sets, or who did not happen to be listening in, were told by their neighbors what had occurred, so everyone in the affected area knew quickly what the trouble was. When the facts were known, the consumers good-naturedly forgot their cold dinners and cooperated with the company wherever possible. Many complaints of "no gas" were received at the company's offices early in the afternoon and evening, but after the situation was explained, no one made a kick.

Also, through the Publicity Department, the newspapers were given the facts of the case, with the result that the stories without exception complimented U. G. I. management on handling a difficult situation in a workman-like manner.

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**THE nominating committee of the Commercial Section of the American Gas Association has made its report to the Managing Director, Alexander Forward, recommending the continuation of the present officers for the coming year, as follows:**

**For chairman—J. J. Burns, The Laclede Gas Light Co., St. Louis, Mo.**

**For vice-chairman—G. M. Karshner, Consolidated Gas Co. of New York, New York, N. Y.**

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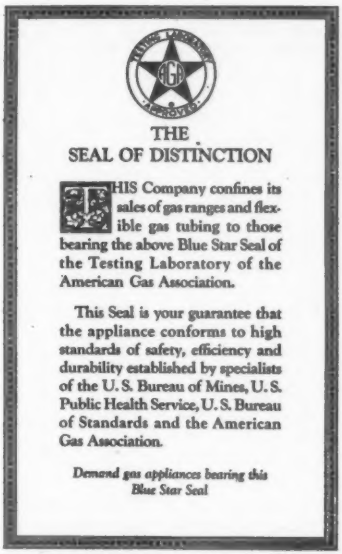
# Canada Ties-In with Laboratory Program

## Joint Agreement Made Whereby Canadians Will Secure Benefits of A. G. A. Tests

By R. M. CONNER
Director, Testing Laboratory, American Gas Association

FORMAL recognition of our Testing Laboratory was given by the Canadian Gas Association during its annual convention at Toronto, Canada, on July 16, when a joint agreement making the work of our testing establishment effective there was passed without a dissenting vote. The agreement was worked out by our Managing Director and the Laboratory Managing Committee with a special committee of the Canadian Gas Association headed by H. E. G. Watson, engineer of the Consumers Gas Company of Toronto.


THE
SEAL OF DISTINCTION
THIS Company confines its sales of gas ranges and flexible gas tubing to those bearing the above Blue Star Seal of the Testing Laboratory of the American Gas Association.
This Seal is your guarantee that the appliance conforms to high standards of safety, efficiency and durability established by specialists of the U. S. Bureau of Mines, U. S. Public Health Service, U. S. Bureau of Standards and the American Gas Association.
Demand gas appliances bearing this Blue Star Seal

*Canada's noteworthy decision to tie-in with the Laboratory will benefit company and customer alike*

While the joint agreement has not been officially ratified by both Executive Boards, it will probably take final form quite similar to the following text as adopted in Toronto:

AGREEMENT BETWEEN
THE AMERICAN GAS ASSOCIATION, INC.
AND
THE CANADIAN GAS ASSOCIATION

In view of the mutual desire of the Associations above mentioned to further standardization and perfection of safety and performance of gas-burning appliances in the Dominion of Canada, the following stipulations are agreed to:

1. The American Gas Association agrees to accept for testing, and to test at the standard fee, any flexible gas tubing or any gas-burning domestic appliances for which approval requirements have been adopted, offered by any Canadian manufacturer or by any manufacturer in the United States of America who desires Canadian approval.

2. When such tubing or appliance is found to have passed the Laboratory requirements, said results shall be certified to the Executive Committee of the Canadian Gas Association or to any other Committee which that Association may designate. It shall thereafter be the right of the Canadian Gas Association through its duly authorized body to issue certificates of approval of such tubing or appliances for sale in the Dominion of Canada.

3. In cases where, in accordance with usual Laboratory procedure, the manufacturer is entitled to approval for safety contingent upon his agreement to make such changes in his output as may be necessary to comply with remaining requirements, such information shall be given to the duly authorized representatives of the Canadian Gas Association who may issue contingent approvals for the current year to such tubing or appliances.

4. In the interest of the maintenance of confidential information, and in accordance with A. G. A. Laboratory procedure in the United States, when an appliance or a sample of tubing is disapproved, notice should be sent only to the manufacturer thereof with the usual information in what respects his product fails to meet approval requirements.

5. In order that the representatives of the Canadian gas industry shall be fully acquainted with the approval requirements of the American Gas Association Testing Laboratory, and have a voice in their preparation or revision, the President or Executive Committee of the

Canadian Gas Association may appoint a Canadian gas man and a Canadian manufacturer as members of the General Approval Requirements Committee of the American Gas Association. Such committee members shall receive notices of all meetings and be placed in possession of every detail of information pertaining to preparation, revision, and adoption of approval requirements.

6. In order to make the work uniform, it is desirable that the Canadian Gas Association adopt as its own the already standard approval requirements for gas ranges, space heaters, water heaters, central house heating appliances, and flexible gas tubing, which have been prepared by the appropriate sub-committees, passed by the General Approval Requirements Committee and by the Safety Requirements Committee and upon which extensive tests have already been conducted; it being understood that these approval requirements will possibly demand revision from time to time.

7. The committee representatives of the Canadian Gas Association above referred to shall assist in the consideration and preparation of all approval requirements, having an equal vote with each of the other members of the General Approval Requirements Committee.

8. Hereafter when it is proposed to revise any approval requirements, or to provide requirements for other and further appliances, it shall be the privilege of the Canadian Gas Association through its duly authorized body to appoint a member of the Canadian gas industry and a manufacturer on the sub-committee to engage in such work.

9. It is understood and agreed that the Canadian Gas Association may adopt any form of approval seal it desires for use in the Dominion of Canada and that the gas company members of the Canadian Gas Association recognize said Canadian Gas Association seal as the official emblem of safety, quality and efficiency.

10. The Canadian Gas Association agrees on its part to recognize and award the Canadian Gas Association's approval seal to appliances or tubing manufactured in the United States of America upon evidence from A. G. A. Testing Laboratory that such appliances and tubing have passed the approval requirements tests. Manufacturers awarded both United States and Canadian approvals may display both seals on their product if desired.

There will naturally be quite a number of details that will have to be worked out later on. However, in general, the procedure will probably be that the interested appliance manufacturers will submit products on which they desire ap-

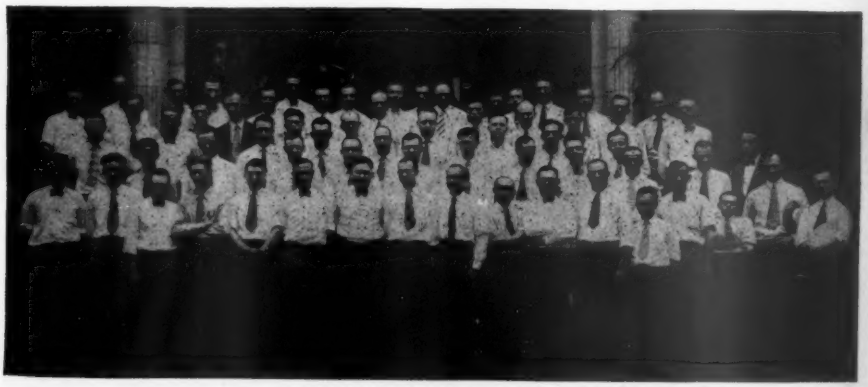
(Continued on page 506)

## 72 Take Industrial Short Course at U. of Ill.

SEVENTY-TWO students from 12 states were registered at the second annual short course in industrial gas engineering offered by the Illinois Gas Association at the University of Illinois, Urbana, Ill., starting June 20.

A feature of the course was the exhibit of gas-fired central house heating equipment, which offered the students an opportunity to inspect the various types of appliances. Lecture work, discussions, and symposiums proved especially interesting to the students.

While the major part of the work was concerned with selling house heating, the industrial side of the business was also covered.



*Students at the industrial gas course at the University of Illinois*

# How Rate Structure Influences Gas Sales

## An Actual Case That Proves the Relationship Between Improved Rates and Increased Sales

By L. R. KING
Rate and Appraisal Engineer, The United Light and Power Co., Davenport, Iowa

*This article is made available through the policy of the Rate Structure Committee to prepare for publication interesting rate data for our members.—Ed.*

IT has frequently been stated that a definite relationship exists between the form of gas rate and the average sales per customer. I believe the experience of the Chattanooga Gas Company as outlined in this article demonstrates the relationship between its rate form and gas consumption.

On July 1, 1922, the following rate, authorized by the Utilities Commission, became effective:

| | |
|---|---|
| First 10 M per month | $1.65 net |
| Next 10 M per month | 1.40 net |
| Next 10 M per month | 1.20 net |
| Next 20 M per month | 1.00 net |
| Over 50 M per month | .90 net |

Delayed Payment Charge: 10c per M.
Minimum Bill: $1.00 per Meter per Month.

This rate remained in effect until December 1, 1924, when the following rate, which had been accepted by the city and authorized by the Utilities Commission, became effective:

| | |
|---|---|
| 200 cu.ft. or less per month | $1.00 net |
| Next 19.8 M per month | 1.20 net |
| Next 30 M per month | 1.10 net |
| Next 150 M per month | .90 net |
| Next 300 M per month | .80 net |
| Next 500 M per month | .70 net |
| Next 2000 M per month | .60 net |
| Over 3000 M per month | .50 net |

Delayed Payment Charge: 10%
Minimum Bill: $1.00 per Meter per Month.

An analysis has been made of the months of June, 1924, and June, 1926, under the two different rates showing the number of consumers using gas at the various rates of consumption, that is, 1800, 1900, 2000, etc., cu.ft. per month. Table 1 shows the result of part of this analysis. Table 2 is a summary of the analysis showing the results by various blocks. Table 3 shows the general classification of customers and the average consumption of each class during the two months.

From these various tables I believe that certain definite conclusions can be drawn. The two rates crossed at 1700 cu.ft.: That is, the bill for 1700 cu.ft. is the same under both rates, namely $2.80, at which point the average rate is $1.65 per M. At the time the present rate was installed those consumers using less than 1700 cu.ft. had their bills somewhat increased, except that the minimum bill for consumers using 200 cu.ft. or less remained the same. Those using more than 1700 cu.ft. secured immediately a lower rate. The number of consumers in June, 1924, whose rates were increased was 1960, or 36.5 per cent of the total. In June, 1926, the new rate had been in effect about one and one-half years so that sufficient time had been given for users to become familiar with it, although, in general, I believe that most consumers do not, as a matter of fact, know what the gas rate in their town is, their principal interest being in the comparison of their monthly bills. However, the $1.20 rate for all domestic consumption after the initial charge is met is a very fine talking point for salesmen desiring to sell new ranges, space heaters, hot water heaters, etc. And, at such a time when the customer's attention is called to the rate, it is of very great interest to him.

The comparison of the two months shows that the number of consumers using less than 1000 cu.ft. of gas decreased from 24.5 per cent of the total in 1924 to 22.7 per cent in 1926. The number using between 1100 cu.ft. and

TABLE 1
CHATTANOOGA GAS COMPANY

| Cubic Feet Used | Number of Consumers June, 1924 | Number of Consumers June, 1926 | Per cent of Total Cubic Feet June, 1924 | Per cent of Total Cubic Feet June, 1926 | Per cent of Total Customers June, 1924 | Per cent of Total Customers June, 1926 |
|---|---|---|---|---|---|---|
| 00 | 116 | 150 | .00 | .00 | 2.16 | 2.32 |
| 100 | 98 | 115 | .03 | .03 | 1.83 | 1.78 |
| 200 | 84 | 117 | .05 | .06 | 1.56 | 1.81 |
| 300 | 88 | 115 | .08 | .09 | 1.64 | 1.78 |
| 400 | 113 | 120 | .14 | .12 | 2.11 | 1.86 |
| 500 | 139 | 119 | .22 | .15 | 2.59 | 1.84 |
| 600 | 132 | 120 | .25 | .18 | 2.46 | 1.86 |
| 700 | 114 | 155 | .25 | .30 | 2.12 | 2.40 |
| 800 | 138 | 130 | .34 | .27 | 2.57 | 2.01 |
| 800 | 132 | 177 | .37 | .41 | 2.46 | 2.74 |
| 1,000 | 159 | 147 | .49 | .38 | 2.96 | 2.27 |
| 1,100 | 165 | 151 | .56 | .42 | 3.07 | 2.33 |
| 1,200 | 168 | 130 | .62 | .40 | 3.13 | 2.01 |
| 1,300 | 155 | 145 | .62 | .48 | 2.89 | 2.24 |
| 1,400 | 145 | 149 | .65 | .53 | 2.70 | 2.30 |
| 1,500 | 176 | 165 | .81 | .63 | 3.28 | 2.55 |
| 1,600 | 136 | 173 | .69 | .71 | 2.53 | 2.68 |
| 1,700 | 167 | 161 | .88 | .70 | 3.12 | 2.49 |
| 1,800 | 146 | 172 | .81 | .79 | 2.72 | 2.66 |
| 1,900 | 125 | 173 | .76 | .84 | 2.33 | 2.68 |
| 2,000 | 134 | 164 | .83 | .84 | 2.50 | 2.54 |
| 2,000 to 2,500 | 614 max. | 582 | 4.38 | 3.35 | 11.44 | 9.00 |
| 2,500 to 3,000 | 523 | 663 max. | 4.55 | 4.66 | 9.74 | 10.25 |
| 3,000 to 3,500 | 368 | 527 | 3.73 | 4.38 | 6.86 | 8.15 |
| 3,500 to 4,000 | 261 | 317 | 3.05 | 3.04 | 4.86 | 4.90 |
| 4,000 to 4,500 | 167 | 244 | 2.20 | 2.65 | 3.12 | 3.77 |
| 4,500 to 5,000 | 121 | 173 | 1.81 | 2.10 | 2.25 | 2.68 |
| 5,000 to 6,000 | 145 | 189 | 2.51 | 2.66 | 2.70 | 2.92 |
| 6,000 to 7,000 | 88 | 118 | 1.72 | 1.96 | 1.64 | 1.82 |
| 7,000 to 8,000 | 45 | 73 | 1.06 | 1.40 | .84 | 1.13 |
| 8,000 to 9,000 | 24 | 46 | .58 | 1.00 | .45 | .71 |
| 9,000 to 10,000 | 17 | 39 | .56 | .95 | .35 | .60 |

2000 cu.ft., inclusive, decreased from 28.3 per cent to 24.5 per cent. That is, the consumers using less than 2000 ft. decreased from 52.7 per cent in June, 1924, to 47.2 per cent in June, 1926, and the number of consumers using more than 2000 cu.ft. per month necessarily increased by the same difference.

Chattanooga is a thriving industrial city with a population of about 60,000 in the territory served by the gas company. The ratio of population to customers, about ten to one, is I believe, typical of Southern cities where the negro population forms a considerable part of the total. The Chattanooga Gas Company probably differs from many other gas companies in that more than 40 per cent of its sales are to three large industrial consumers. Aside from this fact, I am of the opinion that it is quite typical of other Southern cities.

While the tables show that in nearly all cases the percentage of consumers using 1800 feet or less per month decreased between June, 1924, and June, 1926, and the percentage of consumers using 1900 feet or more per month increased during the same period, there must be, I suppose, some exception to every rule in order to prove the necessity of a rule and the present case is no exception to this statement. This is demonstrated by the fact that not only did the percentage of consumers using between 2000 and 2500 cu.ft. of gas decrease, but the actual number of consumers also decreased. I have no explanation for this

TABLE 2
CHATTANOOGA GAS COMPANY

| Cubic Feet Used | Number of Consumers June, 1924 | Number of Consumers June, 1926 | Per cent of Total Cubic Feet June, 1924 | Per cent of Total Cubic Feet June, 1926 | Per cent of Total Customers June, 1924 | Per cent of Total Customers June, 1926 |
|---|---|---|---|---|---|---|
| 0 to 1,000 | 1313 | 1465 | 2.22 | 1.99 | 24.46 | 22.67 |
| 1,100 to 2,000 | 1517 | 1583 | 7.23 | 6.34 | 28.27 | 24.48 |
| 2,100 to 5,000 | 2054 | 2506 | 19.72 | 20.18 | 38.27 | 38.75 |
| 5,100 to 10,000 | 319 | 465 | 6.43 | 7.97 | 5.98 | 7.18 |

TABLE 3—JUNE 1924
CHATTANOOGA GAS COMPANY

| *Gas Sales* | *Number Customers* | *Sales MCF* | *Average Rate* | *Average Consumption* |
|---|---|---|---|---|
| Residential | 4739 | 10528.8 | $1.6531 | 2220 |
| Commercial | 555 | 5093.0 | 1.2321 | 9170 |
| Industrial | 44 | 16761.9 | .5525 | 380950 |
| Miscellaneous | 36 | 267.2 | | |
| Total | 5374 | 32650.9 | 1.0332 | 6070 |
| | | JUNE 1926 | | |
| Residential | 5790 | 13895.5 | $1.5015 | 2400 |
| Commercial | 585 | 4722.5 | 1.2063 | 8070 |
| Industrial | 92 | 20455.7 | .5700 | 222340 |
| Miscellaneous | | 14.7 | | |
| Total | 6467 | 39088.4 | 99.15 | 6050 |

TABLE 4
CHATTANOOGA GAS COMPANY

| *Consumption* | *Old Rate* *Average Rate* | *Total Bill* | *New Rate* *Total Bill* | *Average Rate* |
|---|---|---|---|---|
| 0 | | $1.00 | $1.00 | |
| 100 cu.ft. | | 1.00 | 1.00 | |
| 200 cu.ft. | | 1.00 | 1.00 | |
| 400 cu.ft. | | 1.00 | 1.24 | |
| 600 cu.ft. | | 1.00 | 1.48 | |
| 800 cu.ft. | | 1.33 | 1.72 | |
| 1,000 cu.ft. | $1.65 | 1.65 | 1.96 | $1.96 |
| 1,500 cu.ft. | 1.65 | 2.48 | 2.56 | 1.70 |
| 1,700 cu.ft. | 1.65 | 2.80 | 2.80 | 1.65 |
| 2,000 cu.ft. | 1.65 | 3.30 | 3.16 | 1.58 |
| 2,500 cu.ft. | 1.65 | 4.13 | 3.76 | 1.50 |
| 3,000 cu.ft. | 1.65 | 4.95 | 4.36 | 1.45 |
| 5,000 cu.ft. | 1.65 | 8.25 | 6.76 | 1.35 |
| 10,000 cu.ft. | 1.65 | 16.50 | 12.76 | 1.28 |
| 15,000 cu.ft. | 1.57 | 23.50 | 18.76 | 1.25 |
| 20 000 cu.ft. | 1.53 | 30.50 | 24.76 | 1.24 |

peculiar paradox and therefore offer none.

I believe the month of June, chosen for the analysis, was as good as could be chosen because at that time of year few space heating appliances are in use in Chattanooga.

I am indebted to A. J. Goss, manager of the Chattanooga Gas Company, who worked out the data for this analysis.

## West Virginia Ass'n to Meet October 26 and 27

THE annual meeting of the Public Utilities Association of West Virginia will be held at Parkersburg, West Virginia, on Wednesday and Thursday, October 26 and 27, according to the announcement of A. Bliss McCrum, secretary.

Headquarters will be at the Chancellor Hotel.

## Industrial Course at M. I. T. Proves Very Successful

THE sixth annual industrial course, offered at the Massachusetts Institute of Technology from June 13 to 24, and sponsored by the Industrial Gas Educational Committee of the New England Gas Association with the cooperation of the American Gas Association, attracted 25 students. About half of those enrolled were from states outside of New England.

Two of the men enrolled travelled great distances to attend the course. These were W. A. Hudson, of the Birmingham Electric Co., Birmingham, Ala., and C. T. Yates, of the Central Arizona Light and Power Co., Phoenix, Ariz.

The close of the course coincided with the annual meeting of the Industrial Division of the New England Gas Association, which is covered in another page in this issue.

The Industrial Gas Educational Committee of the New England Gas Association consists of the following: J. J. Quinn, chairman, H. Vittinghoff, R. J. Phelon, Prof. G. B. Wilkes, and J. J. Winn, Jr.

## M. I. T. Makes Contribution To Industrial Progress

OF the recent contributions from the department of Fuel and Gas Engineering of the Massachusetts Institute of Technology, a paper by Hoyt C. Hottel on "Radiation from Gases," which is to be presented in the near future before the American Institute of Chemical Engineers, is among the most important. In the past, it has been customary to neglect radiation from gases in problems of heat transmission, due to the complexity of the computations involved. Hottel, however, has derived a number of charts which make it possible to calculate this radiation without difficulty.

He has shown by a number of practical examples that this factor is far from negligible and in fact in many cases is even greater than the transfer of heat by convection. His charts will be of great assistance in the design of any equipment involving heat transfer from gases.

It has been known, for example, that the heat transfer coefficients actually found in the convection tubes of cracking coils were larger than those calculated from the usual convection formulas, and it was therefore impossible to compute with any degree of accuracy the number of tubes required. By combining Hottel's charts and the convection formulas, values are obtained for the coefficients which agree closely with those actually found in practice.

This latest contribution from the Department of Fuel and Gas Engineering is a good illustration of one phase of the work carried on by them. In addition to formal instruction, both in the class room and in field work, the department undertakes original investigations, and also endeavors wherever possible to apply to industry the results of research by other investigators, when these investigators have neglected to do so. Hottel's work falls under this last heading.

The original investigations of the department are made both in the laboratory, and on fuel scale apparatus in the field. Research is now being carried out in the laboratory on rates of flame propagation in gaseous mixtures, hydrogenation of coal, synthesis of hydrocarbons, reactions in gas producers and water gas generators, and on a number of other subjects.

In the various field stations located at plants of the Bethlehem Steel Company, Iroquois Gas Corporation, Cambridge Gas Light Company, and the Tide Water Oil Company, studies of a number of plant operations are being made. These include such subjects as heat transfer in regenerators, steam decomposition in water gas generators, and efficiency and operating characteristics of crude petroleum stills.

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## The Consumption of Gas In the Textile Mills

By TECH. ED., "TEXTILE WORLD"

THE largest gas consumption in textile mills is in the plants doing cotton goods dyeing, bleaching, and finishing. The gas consumption in such mills is around 100,000 cu.ft. per month for each million yards of cloth finished. For example, in one plant that we know of, 75,000 cu.ft. of gas is used per month per million yards of cloth processed. In another plant the gas consumption is 125,000 cu.ft. per month per million yards processed. In the first plant gas is used only for singeing; in the second plant gas is used both for singeing and calender roll heating.

The smaller cotton goods dyeing, bleaching and finishing mills process about two million yards monthly. The largest plants process around twenty million yards monthly. With gas at $1 per 1,000 cu.ft. the small plant would expend about $200 a month for gas, while the large plant would spend nearly $2000 a month for gas. Most plants will come in between these figures. Probably $1000 a month for gas would be a fair estimate. My estimate would be that there would probably be 200 to 300 mills in the country that expend $1000 a month for gas up to $2000.

In addition to the cotton goods dyeing, bleaching and finishing mills mentioned above, there are hundreds of woolen and worsted mills and hundreds of knitting mills that use smaller quantities of gas. In the woolen and worsted mills, gas is used for cloth singeing and in some cases it is used for steam generation in departments that are remote from the boiler plant so that it would not pay to carry over the steam for process requirements, such as boiling, drying, pressing, etc.

Knitting mills of small and medium size plants, of which there are probably 1000 mills in the industry, frequently generate their process steam with gas fuel. The steam gas machine makes an ideal arrangement for such plants for such purposes as furnishing process steam for bleaching, dyeing, drying, and pressing. The steam gas machine manufacturers are constantly pushing the sale of their equipment in the textile field, particularly among the knitting mills, and they should receive the cooperation of the gas companies in furthering the use of gas fuel in the textile industry.

# A. G. A. Enlarges Statistical Department

## Work of New Department Will Prove of Great Value To the Entire Gas Industry

*P. A. Ryan*

THE collecting and disseminating of the significant facts and figures of the gas industry has long been recognized as an activity of the greatest importance—in fact, one of the major functions of the Association work. From its organization A. G. A. Headquarters has endeavored to gather at least annually the data essential to enable it to speak as the authoritative mouthpiece of the industry.

As the Association grew and as its statistical service broadened and received greater recognition, the demands for authoritative statistical data greatly increased from sources both within and without the industry. The large part which gas service has come to play in the social and economic life of the country imposes upon the Association the duty of informing the public fully and accurately as to the industry's growth and its possibilities of further service to them. So greatly have the demands for statistical data increased, that it has been necessary again to amplify and reorganize the Statistical Bureau at Headquarters.

The work of the new Department will prove of even greater value to the entire industry, as it will be possible to develop more completely than in the past collateral studies and statistical research on specific problems of interest to the members. The Department will continue to have the cooperation of the Advisory Committee on A. G. A. Statistics, giving it background and contact with the accounting executives of representative companies throughout the country.

The Association announces that Paul Ryan has been added to the Staff in the capacity of statistician with a view to reorganizing and enlarging the statistical service which it has been possible to develop to date.

Mr. Ryan graduated from the Massachusetts Institute of Technology in 1923, and later became assistant power engineer for the New York and Queens Electric Light and Power Company of New York. In 1925 he was awarded one of the prizes offered by Bonbright and Company in a nationwide contest for the best papers on the development of the electric light and power industry.

He is also a graduate of the two-year course in public utility management at the Harvard School of Business Administration, receiving the degree of M.B.A. in 1926. Subsequent to graduation he was on the staff of the Harvard Business School, engaged in research in public utility economics under the direction of Prof. Philip Cabot, who is in charge of the public utility work at Harvard. Mr. Ryan has also been associated in consulting work on rates and market analysis for gas and other utilities.

Previous to joining the A. G. A. staff on July 1, he was on the chief statistician's staff of the American Telephone and Telegraph Co. in New York.

The Association wishes to take this opportunity of acknowledging the splendid cooperation it has received from its member companies in the development of statistical work in the past. The complete success of the new Department will very largely depend on the continuation of this cooperation so that a greater measure of service to the industry may be assured.

## THE EDITOR'S SHEARS AT WORK

*Under this heading, we will give our readers pertinent comment from the daily press.*

**Gas Direct from the Mine**

Editorial from *N. Y. Times*, July 3

An experiment is to be made in Germany which will be watched with keen interest not only by engineers but by economists and labor leaders. Gas generated at the mines of the Ruhr and supplied at high pressure to homes as far distant as 450 miles, a single, colossal battery of gas retorts for all Germany, local gas companies transformed into mere retailers of centrally produced gas—such is the startling undertaking on which a coal utilization company of Essen is about to embark. The Ruhr cannot utilize the enormous quantities of coke-oven gas which is a by-product in the manufacture of blast-furnace coke. Nothing hurts a chemist more than waste. Hence this single, national gas plant.

In this German project we see at last a rational plan for the generation of energy at the mine mouth and its distribution over distances as great as any thus far reached by an electric station. To build enormous power houses at the mine and to send electricity to any point in a whole group of States—one of the features of Governor Pinchot's giant power scheme—has been dismissed by engineers as impractical. Where is the huge quantity of necessary condensing water to be found? One Brooklyn electric power house alone pumps 576,000,000 gallons of river water daily into its condensers—more than the combined daily water consumption of the Boroughs of Manhattan and the Bronx. In the generation of gas no water is required.

There is nothing visionary in this German proposal. Gas-pipe lines several hundred miles long are not novelties. A 450-mile line is soon to be laid from the Texas Panhandle to Kansas City and is to carry 100,000,000 cubic feet of natural gas a day. Two 300-mile lines already supply West Virginia natural gas to communities in Ohio. Manufacturers of gas may be compelled to adopt the mine-to-city pipe line because of the economic exigencies by which they are faced. In twenty years there has been an increase of 375 per cent in the consumption of gas. A fivefold increase may be expected in less than another twenty years. It may be cheaper to build new generators at the mines and lay pipe lines several hundred miles long than to acquire additional costly city real estate and to pay more and more for coal and for freight charges.

And the sociological consequences of the experiment are fully as important as the economies to be expected from centralized, large-scale production.

**Have You Made Your Reservations for the NINTH ANNUAL CONVENTION of the AMERICAN GAS ASSOCIATION?**

**Hotel Stevens Chicago, Oct. 10-14**

## Gas Exhibit Arranged for N. Y. Power Show

GAS will be well represented at the annual Power Show in New York this winter, due to an exhibit being arranged by the gas companies of the Metropolitan District. A. M. Apmann, vice-chairman of the Industrial Gas Section Committee on Display and Contact with National Industrial Organizations, reports that a model of the exhibit has been completed, and that the contributing gas companies have appropriated sufficient funds to make the exhibit a success.

The gas companies included in this are the New York and Richmond Gas Company, the Brooklyn Union Gas Company, The Brooklyn Borough Gas Company, The Kings County Lighting Company, and the Consolidated Gas Company of New York.

*Text is taken from a recent speech of A. G. King, A. G. A. Service Engineer, before Southern Gas Ass'n*

# Quebec Does It With Gas

## Public Service Commission Discusses Fuels of Future in Decision

**QUITE incidentally, we imagine we hear the gas men wondering who on earth would want to heat their homes, or even cook with electricity, when gas, in Montreal, is much cheaper, more convenient and available, and there are always so many tons of nice, clean-burning, low ash content coke waiting to convert anthracite users to its ever-growing army of warmly satisfied customers.**

CONSTITUTED authority in Canada—as well as in other countries—would seem to be quite agreed that we cannot look forward to using electricity for the complete heating of houses, according to an article in a recent issue of *Dual Service*, the employee bulletin of the Montreal Light Heat and Power Consolidated. The following paragraphs have been abstracted from the magazine.

In a decision handed down by the Quebec Public Service Commission on February 28th last, adequate reasons for the stand it has taken against the heating of houses entirely by electricity were given and at the same time a tariff authorized to be charged for auxiliary heating only by electricity.

The principal reasons advanced by the Commission, in its decision, were the following:

*(a) The enormous quantity of electrical energy which would be required and which may be utilized more efficiently for other purposes, such as for the production of motive power and for lighting;*

*(b) The high cost of electrical energy compared with the cost of combustibles presently in use for heating purposes;*

*(c) The enormous amount of capital which would have to be invested for the establishment of generating stations, transmission lines, sub-stations, distribution lines and transformers which would be necessary to deliver electricity for heating purposes to the consumers.*

The Commission further states that engineers, public service commission bodies and companies supplying electricity have all reached the conclusion, that under present conditions the heating of houses entirely by electrical energy is impractical and prohibitive.

Quite to the contrary, the idea has prevailed of late years that electricity is destined to take the place of coal and other fuels for the heating of houses, offices, etc., on an extensive scale and the immense water powers of Canada (which are vaguely considered by some people illimitable), will amply suffice to meet all heating requirements, especially in Quebec and Ontario where water powers are abundant.

Entirely apart from the absolute basic unsoundness of such a project, both economically and mechanically, as ideal as it might appear to be, no less an authority than the Hydro-Electric Power Commission, whose report and negative decision are referred to in the judgment of the Quebec Commission, stated in its blue book report of February 28, 1918:

*"The climate of the greater part of this country is so severe in the winter that even the immense potentialities of its water powers, if fully developed, would be altogether inadequate to cope with the demand for power for electric heating."*

For instance, the Ontario Commission has estimated, after a very careful study of the question, that, based on a demand of 12½ h.p. per home (a very conservative figure as an average for large and small homes), it would take 1,000,000 h.p. of electrical energy to heat the 80,000 homes which existed in the City of Toronto at that time. This tremendous

COMPARISON OF HEATING VALUES AND COST OF OTHER FUELS, WITH ELECTRICITY

| Fuel | Calorific Value | Efficiency | Equivalent to 1 K.W.H. | Quantity Rate | Cost |
|---|---|---|---|---|---|
| Gas —1 cubic foot | 470 B.T.U. | 80% | 9 cu. ft. | 75c per M.C.F. | .675c |
| Coal —1 lb. anthracite | 12,600 B.T.U. | 50% | .57 lbs. | $16.00 per ton | .456c |
| Coke—1 lb. gas | 12,500 B.T.U. | 50% | .55 lbs. | $13.00 per ton | 357c |
| Oil —1 lb. distillate | 18,000 B.T.U. | 70% | .27 lbs. | 13c per gallon (9 lbs. to gal.) | 39c |
| Electricity—1 K.W.H. | 3,415 B.T.U. | 100% | 1 K.W.H. | 1.5c per K.W.H. | 1.5c |

Unit of heat:—The British unit of heat, or British thermal unit (B.T.U.) is that quantity of heat which is required to raise the temperature of 1 lb. of water 1° Fahr., at or near 39.1° Fahr., temperature of maximum density of water.

quantity of power would have to be supplied for the electrical heating of homes alone—no factories, no offices, no works, no street cars, no houses even, would get any lighting or power from this, it would all be required for heating homes alone, and more would be needed in proportion, as the population increased.

Montreal, with almost twice that number of homes to-day, would then require 2,000,000 h.p. Or, the output of ten such giant power plants as we have at Cedar Rapids, which is rated at 220,000 h.p. at full capacity, and carries, at the present time, the greater part of the entire electrical lighting and power load of the city.

The entire electric energy production in the Province of Quebec, in 1925, according to the latest Dominion Government figures received, was 1,444,166 h.p. roughly 564,000 h.p. short of what would be required for residence heating only of Montreal, and as in the case of Toronto, no lighting or power for factories, offices, works, street cars, nor even the houses of the city and of the whole remainder of the Province.

It may be added that the 12,000,000 h.p. which represents the estimated total possible development of Quebec water powers would not be sufficient to supply merely the existing homes of Quebec with electric energy for heating alone, exclusive of all other domestic, commercial and industrial requirements.

The Public Utilities Commission of the State of Idaho, whose findings are also mentioned in the judgment, after an exhaustive inquiry into the question declared it could offer the people of the State no reasonable hope of electricity ever being used generally for the heating of homes; that it was forced to the conclusion the use of electricity is neither feasible or practical for the heating of homes in competition with coal; that anyone wishing to undertake to furnish such service could not do so profitably; and moreover, as long as electricity can be used as a motive power its use for the heating of houses would be a waste and an extravagance.

At the existing prices for coal and other fuels compared with the rates for electricity, electric heating is too expensive to be adopted extensively. It can be readily demonstrated that, of the total energy in fuels at the present time, and under the most favorable conditions possible in the largest and most modern plants, a maximum of 12 to 15 per cent is obtainable in the form of mechanical power; this is only about one-third of the percentage obtainable in the form of heat in the average house furnace, that is from 36 to 45 per cent of the total, and only about one-fourth of that obtainable in the form of mechanical power from the water power of hydro-electric plants, which average 48 to 60 per cent efficiency in this respect.

This fact, along with the others given regarding electricity, leads to the conclusion, that, so far as is practicable, fuels should be used for heating, and electrical energy for mechanical power.

The cost of heating by fuels compared with heating by electricity must be considered according to the relative prices for these commodities and based upon their relative efficiencies.

(Continued on page 508)

# London Journal Editorializes on Laboratory

## Pertinent Comment on Blue Star Plan of Merchandising from Editorial Pages of Journal

**THE material printed here appeared on the editorial page of the London Gas Journal, London, England for June 8. The Editor of the Gas Journal asks two questions that are especially important. R. M. Conner, director of the Laboratory, has sent a communication to the Journal, answering the questions. The substance of Mr. Conner's reply is given at the end of the editorial.**

THE gas industry of the United States is more enamoured today of the testing laboratory of the American Gas Association than it probably was at its inception. It has cause to be. Its bounds of usefulness and influence have grown; and both the gas supply industry and the appliance manufacturers are pledged to make its work effective in the common interests. Three or four articles have appeared in the American Gas Association MONTHLY describing what has been done during the first twenty months of the existence of the laboratory—the second anniversary of its birthday being on July 31. Its equipment has been built up on a comprehensive scale, and is being extended as new work demands; and valuable results have already issued from it. Its great mission is to eliminate unworthy appliances, and to set up patronage and demand for nothing but laboratory-approved appliances. Confidence in the work has been established among both the gas suppliers and the appliance makers. The imprimatur of the laboratory is something which the makers desire, and do not despise; it is something which gives to suppliers complete assurance that an appliance can be safely recommended and installed.

"The completeness and thoroughness with which the testing is done, and will continue to be done, by qualified men are the fundamentals to the confidence that has been created. This is a big step forward. The testing centre is at Cleveland; and one of the advantages of its location is that there is available every type of heating gas from producer to carburetted water gas (varying in calorific value from 300 to 600 B.t.u.), and coke-oven and natural gas. That things are not being done on a small scale is seen from the fact that the laboratory has a 150,000 cu.ft. holder; an 80,000 cu.ft. holder will store one of the base gases, as soon as the research work on mixed gases is under way. In a 5,000 cu.ft. holder, the various gases can be mixed; while small holders are also in use from which one kind of gas can be used, or a mixture of two or three in any proportions. The provision for both chemical and physical testing is complete. As an illustration of the comprehensive character of the examination of appliances, we read that a gas range, equipped with a thermostat, undergoes about 160 distinct tests. So

far, 4,638 ranges, 96 space heaters, and 15 different kinds of flexible tubing have been subjected to critical exploration, and have been approved. Prior to October, it is hoped to supply a list of approved water heaters and house heating appliances.

"The work actually accomplished, with all its detail and scrupulous care, is substantial; and this shows meritorious enthusiasm and recognition of responsibility on the part of the staff. We can foresee that from this mass of work there will issue something more than the approval or rejection of appliances submitted for testing. From it must come information which will serve as a guide to further progress in efficiency and utility, which will be of general advantage. In an article by R. M. Conner, the Laboratory Director, he says it is difficult to assess the valuable contributions the laboratory has made, and will make, to the industry's advantage. We agree. No exact money value can be placed on such work; but no man with the intelligence which enables him to observe and to penetrate can fail to see that the supersession of the thermal and working inefficient by the thermal and working efficient will bring in its train benefits of untold value. In all countries, the former has already done incalculable injury to the gas industry; that injury can only be effaced, and in time be forgotten, by approved gas appliances being established, which, through the reputation they will create, will be sought for. That the work done at the laboratory has satisfied the men of the American gas industry, and has ratified the belief that it is a movement in the right direction, is attested by the pledges made on behalf of both gas suppliers and the manufacturers of appliances. At the Atlantic City Convention of the American Gas Association, a resolution was passed pledging all member gas companies to confine sales exclusively to approved types of gas ranges; and since then the manufacturers have pledged themselves to make and stock only appliances which have gained the laboratory 'hall mark.' This dual agreement is a distinct gain; and it will have a marked effect in the future. Moreover, there is nothing in the agreement which will stay progress in invention; for any new design of apparatus or an improvement in any individual part can be submitted to the laboratory; and its approval will be a selling commendation.

"Mr. Conner says that the biggest job in making the laboratory really effective is to get the American people to realize that its work is of real importance to them. It is a good thing to be in the position to say to a member of the public that these goods have received the approval of the official Testing Laboratory; and there is a tendency for the public to like to be possessed of goods with a stamp upon them guaranteeing their worthiness. The appliances that are approved are stamped with the 'Blue Star' seal of the laboratory. It is the symbol of merit. The seal is what the public must be trained to look for, and to insist upon having on their gas appliances. But how is the laboratory to prevent fraud in this matter, by, for instance, the seal being copied by unscrupulous persons, whose goods are not entitled to it?

"Another development is that up to the present eighteen demonstration houses have been installed—'Blue Star' homes—adequately piped, and containing equipment of the highest quality available. For general educational work, the Publicity and Advertising Section of the Association have prepared advertising material, featuring the 'Blue Star' seal of approval, and the desirability of using only approved appliances. Publicity consists of newspaper advertisements, window display material, mailing cards, with a list of appliances which have passed the standards of the laboratory and so have its approval. The work of the laboratory is intended to have a tripartite benefit—benefit to the public, the gas suppliers, and the makers of the appliances; and the lines taken, it appears to us, are the ones

to ensure the proper distribution of the benefit.

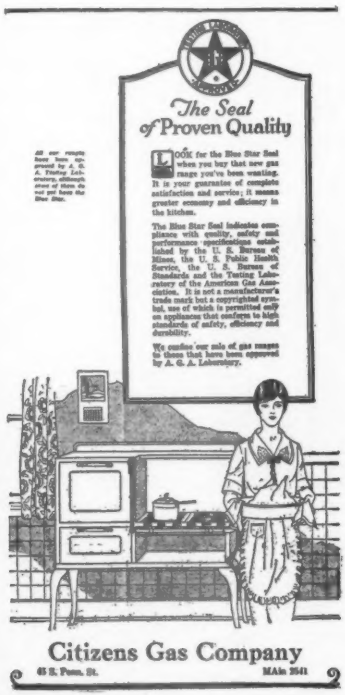
"The 'Blue Star' will in America become well known as the symbol of merit for gas appliances. It appeals to us as an excellent idea. The only two points we should like information upon are: (1) Whether any steps have been, or can be, taken to prevent fraudulent use of the 'Blue Star' for appliances that have not been subjected to the laboratory's tests; and (2) whether there is any danger of the 'Blue Star' damaging business in different grades of the same appliances."

R. M. Conner, director of the Testing Laboratory, has answered the two questions asked by the Editor of the London *Gas Journal*. His reply is materially as follows:

"I am particularly interested in the two questions raised in the latter part of your article, namely, (1) whether any steps have been, or can be, taken to prevent fraudulent use of the 'Blue Star' for appliances that have not been subjected to the Laboratory's tests; and (2) whether there is any danger of the 'Blue Star' damaging business in different grades of the same appliances. I will comment on these questions in the order that they are listed.

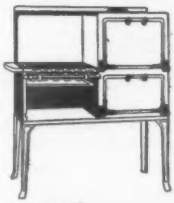
"When a manufacturer submits an appliance for test he completes an Application for Test form, which sets forth the rules and regulations under which the tests will be conducted and the manner in which his appliances will be listed, providing they satisfactorily pass our various approval tests. Our Certificates of Approval also provide that approved appliances must be identified with the Approval Seal. We supply our membership each month with supplementary lists of approved appliances and all of our member companies have on file one or more complete lists of appliances approved by the Laboratory. Our regulations governing the method of listing appliances also provide for publishing any infraction of our rules. In other words, if any manufacturer is found violating his agreement with us we would surely notify our members through our various publications at

(Continued on page 508)


The Seal of Proven Quality
LOOK for the Blue Star Seal when you buy that new gas range you've been wanting. It is your guarantee of complete satisfaction and service; it means greater economy and efficiency in the kitchen.
The Blue Star Seal indicates compliance with quality, safety and performance specifications established by the U. S. Bureau of Mines, the U. S. Public Health Service, the U. S. Bureau of Standards and the Testing Laboratory of the American Gas Association. It is not a manufacturer's trade mark but a copyrighted symbol, use of which is permitted only on appliances that conform to high standards of safety, efficiency and durability.
We confine our sale of gas ranges to those that have been approved by A. G. A. Laboratory.
Citizens Gas Company
MAin 3541

*Local use of material supplied by the American Gas Association*


# Look for this seal



FOR *Safety—Efficiency—Durability!*

THOUSANDS of dollars have been spent by the gas industry, through the American Gas Association, without any commercial return, to improve the standard of equipment sold to Gas Company customers.

The result is the A. G. A. Laboratory Seal of Approval, which you will find on all new gas ranges displayed and installed by your Gas Company. The Seal is a guarantee that your ranges have passed the standard tests for safety, efficiency and durability under practical operating conditions.

*Ask Your Gas Company—And Be Sure!*

LIST OF GAS OFFICES

Consolidated Gas Co. of N. Y. — 151 Essex Street; 131 East 15th Street; 111 W. 17th Street; 11 Audubon Avenue; 1625 Third Avenue

New Amsterdam Gas Company — 142 East 18th Street

Standard Gas Light Company — 31 West 115th Street

Central Union Gas Company — 130 Courtlandt Avenue

Northern Union Gas Company — 132 East Kingsbridge Road; 1215 Webster Avenue

The Bronx Gas & Electric Company — 42 Westchester Square

The East River Gas Company — 11 St. Broadway, L. I. City; 168 Bridge Plaza North, L. I. City

New York & Queens Gas Company — 114 Amity St., Flushing, L. I.

**Consolidated Gas Company of New York**

GEO. B. CORTELYOU, President

1823—MORE THAN 100 YEARS OF UNINTERRUPTED PUBLIC SERVICE—1927

*New Yorkers are learning the value of the Blue Star Approval Seal*

## TIDE OF MEN AND AFFAIRS

### N. J. Public Service Man Wins McCarter Medal

*Jean Davis*

JEAN DAVIS, lineman, Public Service Electric and Gas Company, Camden, N. J., was recently presented the McCarter Medal for the successful application of the prone pressure method of resuscitation.

Mr. Davis saved the life of a woman accidentally asphyxiated while cooking dinner. He happened to be visiting at the house next door, and when the woman's ten-year-old daughter ran from her house screaming that her mother had been overcome, he hastened to the house and started to resuscitate the woman. Resuscitation was carried on for about 20 minutes.

T. B. WILSON, vice-president and general manager of the Louisville Gas and Electric Company, Louisville, Ky., observed his thirty-first anniversary in the public utility field recently. According to the Louisville *Herald:* "Aside from being one of the best known business men of Louisville, his reputation in his chosen field of endeavor has gained for him a well-established fame throughout the country."

Mr. Wilson first came into contact with public utilities when he entered the employ of the Old Citizens General Electric Company of Louisville in 1896. In 1905 he was made secretary of the Louisville Lighting Company, one of the concerns which was later merged into the present Louisville Gas and Electric Company. In 1924 Mr. Wilson became vice-president and general manager of this company.

He is a director of the board of trade and of the Louisville Industrial Foundation.

WILLIAM NAILE, formerly with the Consumers Gas Co., Reading, Pa., is now with the United Gas Improvement Co., Philadelphia, Pa.

W. C. PIERSON, Consolidated Gas Co. of New York, N. Y., has severed his connection with that company and is now with the Philadelphia Suburban Counties Gas and Electric Co., Pottstown, Pa.

D. W. PATTERSON, formerly appliance sales manager of the Northern Union Gas Company, New York, N. Y., has joined the Roberts and Mander Stove Co. He will be located in the metropolitan district of New York, his headquarters being his home at 271 East 197th St., New York, N. Y.

THE JOHNS-MANVILLE CORPORATION, New York, N. Y., have announced the election of Theodore F. Merseles as President. H. E. Manville, who has been President since the death of his brother, T. F. Manville, in 1925, has been elected chairman of the board. Mr. Merseles, who retires from the Presidency of Montgomery Ward and Co., will continue as a director of that company and as chairman of its executive committee.

HAROLD K. SEELEY has recently been appointed engineer of the gas department of the Syracuse Lighting Co., Syracuse, N. Y. Immediately upon graduating from Cornell University in 1910, Mr. Seeley joined the United Gas Improvement Co., Philadelphia, Pa. In December, 1917, when superintendent of the Allentown, Pa., Gas Company, he enlisted in the Thirtieth Engineers and saw a year of service in France.

After the Armistice was signed, he became engineering assistant to J. A. Perry, and was transferred to Syracuse as superintendent of gas production about a year ago.

H. W. FOULDS, advertising manager of The Servel Corporation, New York, N. Y., has been appointed assistant to the president, Frank E. Smith.

*A. W. Thompson*

ARTHUR W. THOMPSON, president of the United Gas Improvement Company, Philadelphia, was awarded the honorary degree of doctor of science by the University of Pennsylvania at the recent commencement exercises.

Mr. Thompson was also recently elected a member of the board of directors of the Consolidated Gas Electric Light and Power Company of Baltimore, Md.

WILBERT J. HUFF, professor of gas engineering, Johns Hopkins University, has been appointed a member of the national campaign committee to cooperate in the raising of funds for Ohio Northern University, Toledo, Ohio.

Among the members of the committee are Senator Frank B. Willis, Senator Simeon D. Fess, and Senator Arthur R. Robinson.

*W. G. Rudd*

WILLIAM G. RUDD has been appointed vice-president in charge of operations of The Peoples Gas Light and Coke Co., Chicago, Ill., to succeed the late John H. Eustace.

Mr. Rudd is forty years old. He has been connected with the company for twenty-two years, and has never worked anywhere else. He joined the company twenty-two years ago as laborer at the Division Street Plant; since then he has filled practically every position in the operating end of the business. Meanwhile, he took correspondence courses and night courses in engineering which enabled him to qualify as a first-class engineer in the manufacture and distribution of gas.

His studies soon brought him promotion from minor executive positions to assistant superintendent of construction, to superintendent of a gas plant, and to assistant operating engineer.

When the late John H. Eustace was elected vice-president in charge of operations in May, 1924, W. G. Rudd was appointed chief operating engineer. Since the death of Mr. Eustace on June 4, 1926, Mr. Rudd has carried the duties that formerly rested upon Mr. Eustace.

ADDISON E. MURRAY, of the Mississippi Power and Light Co., Jackson, Miss., has joined the Jackson Railway and Light Co., at Jackson, Tenn.

ARNO C. FIELDNER, superintendent of the Pittsburgh experiment station of the United States Bureau of Mines, Department of Commerce, has been appointed to the position of chief engineer, Division of Experiment Stations, of the Bureau, effective July 1. In his new position, Mr. Fieldner will correlate the scientific activities of the Bureau's experiment stations located at Pittsburgh, Pa.; Salt Lake City, Utah; Reno, Nev.; Berkeley, Calif.; Tucson, Ariz.; Seattle, Wash.; Bartlesville, Okla.; Rolla, Mo.; Minneapolis, Minn.; Birmingham, Ala.; and New Brunswick, N. J. At these experiment stations problems dealing with the elimination of waste in the different mineral industries are being studied.

Mr. Fieldner, who has served as superintendent of the Pittsburgh experiment station for the past six years, is rated as one of the Bureau's outstanding research specialists. He is regarded as an authority on the technology of coal, coke and gas, and ventilation problems, involving noxious gases, in mines, tunnels, and elsewhere.

Mr. Fieldner, a native of Ohio, was born December 12, 1881. He graduated in chemical engineering at Ohio State University in 1906. In 1907, he joined the staff of the United States Geological Survey and with that organization and later with the Bureau of Mines engaged in research, performing notable work in connection with the utilization of coal, coke, petroleum and other fuels.

During the World War, Mr. Fieldner served as a major in the Chemical Warfare Service, and was placed in charge of gas mask research. The methods developed by him for testing the efficiency of gas masks and absorbents were generally used by the Chemical Warfare Service and were later adopted by some of the laboratories of the Allies.

While serving as superintendent of the Pittsburgh experiment station of the Bureau of Mines, Mr. Fieldner's interests widened from fuels and gas to research on safety in mines, metallurgical and industrial establishments, and health problems in the mining and allied industries. He organized and directed the exhaustive research work of the Bureau of Mines in cooperation with the New York and New Jersey Tunnel Commission on the combustion of automotive exhaust gases and the minimum safe concentration of carbon monoxide in tunnel atmospheres. The professional degree of Chemical Engineer was conferred on him in 1923 by Ohio State University in recognition of this work.

In 1924, Mr. Fieldner spent six months in visiting European laboratories and industries, studying especially the carbonization and processing of coal, and safety in mines research.

Mr. Fieldner has, for a number of years, been chairman of the Committee on Coal and Coke of the American Society for Testing Materials, has twice been chairman of the Chemical Committee of the American Gas Association, and is a continuing member of the Managing Committee of the Technical Section of this organization. He has served as chairman of the Gas and Fuel Section of the American Chemical Society and is now a member of the Executive Committee. He likewise is a member of the Committee on Coal and Coke of the American Institute of Mining and Metallurgical Engineers, is a past chairman of the Steel Works Section of the Engineers' Society of Western Pennsylvania, and is an active member of the Coal Mining Institute of America.

Mr. Fieldner has contributed a large number of articles to the scientific and technical press and is the author of a long list of bulletins and other publications of the Bureau of

*Picture of the Executive Board taken at the recent Atlantic City meeting*

Mines. Two years ago he was invited to become a member of the Coal Research Club of England.

CHARLES A. COLLIER, general sales manager of the Georgia Power Company and its predecessor, the Georgia Railway & Power Company, since 1922, was elected a vice-president of the company at the meeting of the board of directors held June 28. In his new executive position Mr. Collier will be in charge of the company's commercial activities. During his entire career in the public utility field he has engaged in sales work with the exception of one year, immediately following graduation from the Georgia School of Technology.

He has held successively the positions of assistant to the sales manager, assistant to the operating and sales manager and assistant to the general sales manager before becoming himself general sales manager in 1922.

*W. C. Grant*

*George McQuaid*

WILLIAM C. GRANT, who has been one of the state editors of the Associated Press in Texas for the last four years, has been appointed director of the Texas Public Service Information Bureau, succeeding George McQuaid. Mr. McQuaid, who has held the position five years, has become publicity director for the Central and Southwest Utilities company with headquarters in Dallas.

Mr. Grant has spent about 18 or 20 years in the newspaper and press association business, having worked on the *St. Louis Globe-Democrat*, the *San Francisco Examiner*, and a number of Illinois papers, in addition to two "hitches" with the Associated Press. He attended the University of Illinois two years and was graduated in law from Washington University at St. Louis in 1915.

Mr. McQuaid is one of the best known newspapermen of Texas, having been managing editor of the *San Antonio Express*, the *Dallas News*, and other papers. He has a wide acquaintanceship in Texas.

The Texas Public Service Information Bureau is one of a number of bureaus established in various states by public service companies to disseminate impartial information about the public utility business. It is a cooperative enterprise supported by more than thirty Texas companies.

## House Heating Report Covers Large Buildings

AN interesting feature of the House Heating Committee (Commercial Section) report for the year will be the summary presented by the sub-committee on Large Building Heating, of which A. A. Pihlman is chairman. Nine returns from a questionnaire have been secured and the data include the subjects of infiltration, insulation, and the general advantages of heating large buildings with gas.

Other important chapters in the House Heating report will be on insulation, smoke abatement, fireplace heating, oil competition, cost of selling house heating, etc. A bibliography of house heating articles will also be given. There will also be articles describing how house heating is sold in eight large cities, both manufactured and natural gas being covered.

# Affiliated Association Activities

### The Pacific Coast Gas Association

*W. S. Yard*

THE Pacific Coast Gas Association will hold its 34th annual meeting at Santa Cruz, California, on September 12 to 16 inclusive. Santa Cruz is one of California's most popular seaside resort cities and the Association will make its headquarters at the Hotel Casa Del Rey. Meetings will be held in the Beach Casino which connects by covered bridge with the hotel. Owing to the central location of Santa Cruz, seventy miles south of San Francisco, and its accessibility by railroad and highway, a record attendance is anticipated.

While the program and entertainment committees have not yet completed their work, they are making every effort to eclipse the very successful conventions of the past three years. The Association has some fifty committees producing reports for this meeting and in addition a number of papers are to be read by nationally known men.

One feature of the convention will be a three-minute speaking contest which will be carried on through two noon luncheons and finished at the banquet. At one luncheon the contestants will be employees of gas companies and at the second, employees of appliance and supply manufacturers and the winners of these two contests will speak for the Association championship at the banquet.

Another feature will be a contest between the first-aid teams of Pacific Coast Gas Companies. A number of prizes have been offered for this contest including a perpetual trophy offered by F. J. Schafer, who was President of the Association in 1926.

The Commercial Section has arranged to hold a gas-appliance exhibit restricted entirely to such gas appliances as have received the Blue Star Seal of the American Gas Association Testing Laboratory and are manufactured or sold by members of the Pacific Coast Gas Association. This exhibit is expected to give decided impetus to the Blue Star Plan and is especially appropriate as R. M. Conner, Director of the Testing Laboratory of the American Gas Association, is to be present at the convention and is scheduled to talk on this work.

In accordance with the precedent established at previous conventions, the entertainment committee is reserving one entire day for recreation. The golf tournament will be played on this day and an old-fashioned picnic is being planned to be held under the giant redwood trees in the state park at Big Basin.

A daily newspaper will be published during the convention, according to Clifford Johnstone, secretary.

### Pennsylvania Gas Association

THE second annual outing (since the World War) of this Association was held at the Green Valley Country Club, near Reading, Pa., on June 23, and proved a great success.

The committee in charge, composed of M. N. Bailey, chairman, Allyn C. Taylor, J. Calhoun Smith, C. E. Clark, and J. S. Fees, had arranged an interesting program, and all in attendance expressed their pleasure. The ideal location, fine weather, and refreshments left nothing to be desired.

Gas men *vs.* peddlers in a seven-inning baseball game resulted in the score of 17 to 9 in favor of the latter.

Tennis, volley ball, quoits and swimming proved equally popular with the gas men and peddlers and many hard-fought contests brought the appetites of the contestants up to the proper point to enjoy fully the fine chicken dinner, which concluded the outing.

On motion, unanimously carried, the Secretary of the Association was instructed to send a message to H. F. Frey, expressing regret at his absence and conveying to him the wishes of the members assembled for his speedy recovery. Mr. Frey, assistant treasurer of the Allentown-Bethlehem Gas Company, who has always been active in P.G.W. affairs, has been ill for more than a month.

### Empire State Gas and Electric Association

THE annual meeting of the Commercial Section was held at Roricks Glen, June 21-22, with Chairman H. C. Wilder presiding.

A comprehensive program of commercial subjects was offered to those attending, while the entertainment features consisted of golf and a beefsteak dinner. A luncheon was served by the Elmira Water, Light & Rwy. Co. An inspection trip through the Corning Glass Works was also on the program.

The newly elected officers of the Section are: Chairman, William A. Morris, Kings County Lighting Co., Brooklyn, N. Y., and

vice-chairman, John L. Haley, Adirondack Power and Light Corp.

Among the prominent and interesting papers presented were the following: "Home Service," by Miss Maye Lovell, New York, N. Y., and "The Blue Star Home," by J. J. Burns. This paper was read by C. W. Person, secretary of the Publicity and Advertising Section of the A. G. A. Harry E. Merrill, of the Republic Light, Heat and Power Co., delivered an interesting paper on the conversion of equipment for the use of gas fuel, and J. W. Piatt, Brooklyn, N. Y., described the use of gas in the baking industry.

In the evening session the papers presented by T. P. Federer, Adirondack Power and Light Corp., on "Compensation of Salesmen and Distribution of Selling Expense between Promotion Sales Accounts," and S. Bennis, New York, on sales and servicing of gas and electric refrigeration, aroused lively discussion. The evening session closed with "Merchandising Progress" by H. C. Wilder, chairman of the Merchandising Committee.

The next day's program was devoted entirely to electric merchandising.

### Michigan Gas Association

*F. W. Steere*

THE annual meeting of the Michigan Gas Association, held at Mackinac Island, July 5, 6, and 7, in conjunction with the annual meeting of the Michigan Electric Light Association, proved to be one of the most interesting meetings this Association has ever held. The joint session of the two associations was extremely successful, many pertinent and salient ideas concerning utility operation being brought out in the formal addresses and the discussion.

The following officers have been elected: President, F. W. Steere, New York, N. Y.; and vice-president, R. H. Lawlor, Jackson, Mich. Albert G. Schroeder, Grand Rapids, Mich., was re-elected secretary and treasurer.

The election of Mr. Steere as President marks the first time that the Presidency of this association has ever gone to a resident of another state.

The papers on the program were excellently presented, and provoked much interesting discussion. All aspects of the gas business were covered.

The entertainment was of the usual high order. The natural beauty of Mackinac Island was a pleasant feature of the convention.

In a special statement to the MONTHLY, Mr. Steere comments on the utility situation as follows:

"There is no question but that rate structure is one of the most important problems on which the gas industry is now working. Gas service cannot be widely extended especially in new fields, unless the methods of charging for the service are basically sound.

"The aggressive spirit of the Michigan Gas Association is well demonstrated in the work of the Committee on Rate Structure. This work not only shows a thorough understanding of the technical problems involved but a broad view of their practical application to the industry. In other words, the Michigan gas industries appreciate that their profits actually increase in proportion to the real service they are able to give.

"With this spirit, a prosperous future for the utilities of Michigan is more than assured."

### New England Gas Association

*E. W. Berchtold*

THE Annual Meeting of the Industrial Division of this Association was held at the Riverbank Court Hotel, Boston, June 24th, with about 125 in attendance. This meeting marked the close of the Industrial Gas Course at M. I. T.

R. J. Phelon of Worcester presided, with J. J. Winn, Jr., of Fall River as secretary.

In the secretary's annual report an enrollment of 103 was shown, with an average attendance of 62 at the six meetings held during the year.

President Phelon told how the present Industrial Division originated from the first Industrial Gas Course held at M. I. T. six years ago and outlined some of the work which has been accomplished since that time. The President thanked the officers and directors for the cooperation they had given him during his term of office.

The following are the officers and directors elected for the coming year: President, E. W. Berchtold, Boston Consolidated Gas Co.; vice-president, J. J. Winn, Jr., Fall River Gas Works Co.; secretary-treasurer, L. E. Wagner, Providence Gas Co.; Board of Directors, C. H. O'Donnell, Lowell Gas Light Co., L. B. Crossman, Surface Combustion Co., H. S.

Brasseur, Haverhill Gas Light Co., A. B. Rodgers, Norwood Gas Co., S. F. Morgan, New Bedford Gas & Edison Light Co., and G. E. Stephens, Worcester Gas Light Co.

On behalf of the Industrial Gas class, H. J. Ayling presented testimonials of appreciation to Professors Wilkes, Bates, Prescott and Dr. Williams.

J. Paul Leinroth, Chairman of the Educational Committee of the A. G. A. Industrial Section, said New England gas men were to be complimented on their foresight in establishing at M. I. T. the first industrial gas course in the country. The success of this educational work has resulted in the establishment of similar courses in other sections of the country. This year the course was conducted with the cooperation of the American Gas Association and, for the first time, students were solicited outside of New England. Twenty-five men enrolled and of this number about half were representatives of gas companies located away from New England. Mr. Leinroth stated that the policy inaugurated this year, to have separate courses for the engineering and sales phases of the work, will be continued. The course just finished at M. I. T. consisted wholly of engineering fundamentals, while the course to be held in New York will deal only with the selling of industrial gas.

E. W. Berchtold, new President, urged the members to make every effort to attend the meetings held during the year and asked them to submit any suggestions they might have relative to the type of meetings desired and subjects they wished discussed.

*W. A. Doering*

THIRTY men, representing more than 20 New England gas companies, gathered at the new building of the Consolidated Gas Company of Boston, on June 27, and formed the new Accounting Division of this Association.

W. A. Doering, of the Boston Consolidated Gas Co., acted as chairman. Mr. Doering has advocated the formation of an Accounting Division in New England for a long time and the work of organizing has been done almost entirely by him.

The chairman reported that 38 applications for membership had been received and it is expected there will be at least 75 members enrolled by next fall.

President Gould extended the greetings of the New England Gas Association to the new members and expressed his appreciation of Mr. Doering's fine work in getting the division organized.

The following officers were elected: Chairman, W. A. Doering, Boston Consolidated Gas Co.; vice-chairman, R. D. Washburn, Gas & Electric Improvement Co.; secretary-treasurer, Otto Price, Boston Consolidated Gas Co.; Board of Directors, Burton Smart, Portland Gas Light Co., A. F. Short, Providence Gas Co., C. V. Dimock, New Haven Gas Light Co., and L. F. Kelley, Pittsfield Coal Gas Co.

The Constitution and By-Laws of the New England Gas Association have been adopted.

G. S. Lees, New Haven Gas Light Co., A. W. Chase, Manchester Gas Co. and A. D. Duff, Fall River Gas Works Co., are serving on the Membership Committee.

A committee was appointed to investigate the policies followed by various New England gas companies relative to merchandising credits. The committee is composed of: A. E. Shaffer, Boston Consolidated Gas Co.; A. D. Duff, Fall River Gas Works Co., and T. R. Clayton, Providence Gas Co.

Letters will be sent to the members asking for suggestions regarding topics to be discussed at the meetings. The scope of the division's activities will not be confined to accounting problems but will also include customer service and other phases of the gas utility business. Because of this, it is expected that many men not especially interested in accounting will be attracted to the new division.

The next meeting of the Accounting Division will be held in September, at Portland, Me., at the same time the Operating Division meets in that city. Two of the subjects decided upon for the September meeting are merchandising credits and gas rates. Arrangement of the program was left in the hands of the Board of Directors.

After the meeting Mr. Doering conducted the members through the beautiful new office building of the Boston Consolidated Gas Co.

## Speakers' Bureau Active

THE Speakers' Bureau of the Industrial Gas Section, H. H. Smith, chairman, reports that since the last meeting of the Managing Committee of the Section, in April, a total of 278 talks has been given. Of this number, 52 have been given in Massachusetts, Rhode Island, Connecticut, Vermont, New Hampshire, and Maine, with 12 dates still unfilled.

One hundred and twenty-five talks were given in New York State, six in New Jersey, and 80 in West Virginia.

# Pertinent Comments from the Daily Mail

## A Few Letters Recently Received on Subjects of Vital Interest to Every Member of the Association

**SOUTHERN CALIFORNIA GAS CO.**
**Los Angeles, Cal.**

Bernard J. Mullaney, Chairman,
Committee on Education of Gas Company Employees

I am in receipt of your circular letter to students of the home study course on manufactured gas. I wish to take this opportunity to express my appreciation of the work which is being done by the Association, and especially to express my extreme gratitude to Professor J. J. Morgan, who has so ably set forth the principles governing the manufacture and distribution of gas.

As to the course, and the difficulties encountered, I can say only this—If it was a "snap" it would be a waste of both time and money. I have received benefits in direct ratio to the amount of work I have done in solving the problems. I have gained nothing from the easy questions and much from the difficult ones.

Although I have completed only fifteen of the twenty-four lessons, I feel fully repaid for the time, money and effort I have spent, and look forward with pleasure to receiving my next lesson. While I do not expect to be an authority on the manufacture and distribution of gas when I have completed the course, I do feel that I will have acquired a background upon which I can from time to time fill in the practical details connected with whatever phase of the industry I may come in contact with.

Thanking the Association through you, for the interest it has shown in employees of the Industry, I remain

Very sincerely yours,
S. W. BINCKLEY,
*Field Engineer*
*Valuation Dept.*

**DETROIT BRASS & MALLEABLE WORKS**
**Detroit, Mich.**

R. M. Conner, Director,
Testing Laboratory.

We wish to express to the American Gas Association, Mr. Shawn and yourself our great appreciation of the splendid work which has been accomplished through your combined efforts in the standardization of cocks for gas appliances.

This has been a wonderful thing, both for this association and the stove manufacturers. We stand ready at all times to cooperate in any experiments or suggestions to improve design or method of manufacture, and would be glad to have you call upon us.

Yours very truly,
ASS'N OF GAS APPLIANCE COCK MANUFACTURERS
W. S. KILLAM,
*Chairman*
W. C. COCHRANE,
*Secretary*

Imperial Brass Mfg. Co.
Roberts Brass Mfg. Co.
E. J. Schoenberger Co.
Standard-Peninsular Brass Works
McRae & Roberts Co.
Detroit Brass & Malleable Works.

**THE ROBERTS BRASS MFG. CO.**
**Detroit, Mich.**

R. M. Conner, Director,
Testing Laboratory.

It is with a great deal of pleasure that we read the article in the A. G. A. MONTHLY of the operation of your Laboratory. We know from our own experience that the Laboratory has a very definite place in the industry, as demonstrated by the progress that has been made with the adjustable gas cocks for ranges. Our Company feels a great share of this success was accomplished through the efforts of yourself and Mr. Shawn.

Please accept our thanks for the courteous treatment extended to us and, with kindest wishes for your further success, we remain,

Yours very truly,
EARL W. ROBERTS

### A SUGGESTION

**WHEN Committee Chairmen and others use Association stationery in their correspondence, it will be assumed that unless their own address is written on the letter it is desired that replies be directed to the writer in care of Association Headquarters, for attention by the Secretary interested. When it is desired that a reply be directed to the writer at his home address, care should be taken to place the address on the letter. This reminder is given as a result of several suggestions.**

ACCOUNTING SECTION
A. L. TOSSELL, Chairman EDWARD PORTER, Vice-Chairman
H. W. HARTMAN, Secretary

# Utility Taxation and Future Problems

## Corporate Taxation of Utilities Bears Inequitably on Public; Industry Must Guard Against Exploitation of Securities

By THOMAS N. McCARTER
President, Public Service Corporation of New Jersey

*T. N. McCarter*

NO industry can permanently retain its full measure of prosperity unless the condition of the country as a whole is sound and its people, generally speaking, prosperous. Such, happily, is the condition of this nation. Under the present Secretary of the Treasury, the finances of the government have been so remarkably managed that in the post-war period our national debt has already been reduced more than $7,000,000,000 from its high peak—notwithstanding that during this period federal taxes have already been lowered four separate times, to the advantage of the individual taxpayer.

Those who have so ably directed the government's financial affairs and who have accomplished such results as these seem qualified to continue. Now all signs point to the accumulation of another huge surplus, approximating $500,000,000 at the approaching end of the government's fiscal year. This should and will pave the way to a further reduction in federal taxes. While individual federal taxes have already been reduced, this is not true of federal corporation taxes, which, with the exception of the abolition of excess profits taxes exacted during the war period have steadily increased. From 1922 to 1924 inclusive the rate was 12½ per cent; for 1925, 13 per cent, and for 1926 and 1927, 13½ per cent. The increase in the rate for the years subsequent to 1924 was accompanied by the repeal of a capital stock tax, and it was estimated that the loss of the capital stock tax would be approximately offset by the increase in the income tax.

Presented at the N. E. L. A. Convention.

### CORPORATION TAXATION TAXES PUBLIC

It is popular to believe that taxes assessed upon corporations do not affect any considerable number of people. This is not the fact. Corporation taxes, for the most part, naturally must be and practically are passed on to the consuming public and, furthermore, the day has gone by when any burden laid upon stockholders affects only a few people. The number of small stockholders in the corporations of today is legion and all of them are directly affected by the continued imposition of such inequitable taxes. When the Seventieth Congress takes up this subject, therefore, in my opinion, the first aspect of it to receive consideration should be a substantial reduction in corporation taxes.

It is time that the public which consumes the product of corporations, and the stockholding public, were considered in the matter of tax reduction. With due regard to the necessities of the government, I am of the opinion that any revision of federal taxes which leaves the federal corporation taxes in excess of ten per cent of net income will bear most inequitably upon the public, and as time goes on even a tax of this amount should be substantially reduced. We must not

lose sight of the fact that state and municipal taxes are growing by leaps and bounds, especially as they affect the public utility industry, until at the present time most public utilities are approximating ten per cent of their gross in the payment of taxes of all kinds.

This country, so far as I know, stands alone in its practice of taxing capital profits. Such a tax seems to me to contravene the theory of an income tax. It is productive of endless conflict with the government as to the amount of tax payable thereon. Throughout the war period and post-war period the deductions allowed for losses exceeded the amount paid on capital gains, so that the government did not benefit therefrom. I think this tax should be abolished.

### PROBLEMS AHEAD

What are the problems of the industry in the near future? The first one, as I view it, is financial in character—not so much the obtaining of the necessary funds for capital improvements, for while present conditions last that is relatively easy, through the sale of bonds, of preferred stock, including the continued sale thereof to customers, the development of which practice has proved such a boon to the industry in so many different ways, and the sale of common stocks. What I have in mind is the avoidance of the exploitation of any of these properties, or of speculation in their securities, so far as possible, as contrasted with investment therein. If we do not safeguard the industry in these respects, our very prosperity is an element of danger. It is my personal opinion, with which all may not agree, that future groupings of properties should preferably bear some geographical connection with each other rather than to be based upon properties scattered all over the country. I do not mean to criticise the existing situation. I am, rather, referring to the further development of the holding company idea.

Vigorous attempts are being made by the radical element, both in and out of Congress, to force the government of the United States into government ownership and operation of huge power projects. We believe the government should keep out of business. Once the government and the states get into business, there will be no end to it. We should hark back to the late President Harding's well-considered maxim of "Less government in business and more business in government."

This same radical element, jealous of our prosperity and seeking to make demagogic capital out of it for their own selfish benefit, threaten our industry with investigation and attack. Such things, of course, are not pleasant, but the truth will prevail. The abundant common sense of the American public will not allow this great public servant, which has performed such unparalleled service for the nation, to be unduly hampered, much less stricken down at the behest of political self-seekers. I face the future with courage and confidence.

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## Distribution of A. G. A. Booklets Proves Valuable

GAS companies are finding the publications of the American Gas Association especially valuable for distribution to architects, master plumbers and allied groups.

Recently the Brooklyn Union Gas Company, Brooklyn, N. Y., ordered 250 copies of House Heating (Industrial Gas Series), 250 copies of the water heating pamphlet by N. T. Sellman, and 250 copies of the Architect's File Folder, for distribution to the architects of Brooklyn.

The New Haven Gas Light Company, New Haven, Conn., also ordered 40 copies of House Heating for the architects and master plumbers of that city.

All gas companies are urged to take advantage of the opportunity offered by the publications of the Association. The price of these pamphlets and booklets is actual cost of publication.

*PUBLICITY AND ADVERTISING SECTION*
HARLOW C. CLARK, Chairman E. FRANK GARDINER, Vice-Chairman
CHARLES W. PERSON, Secretary

# P. U. A. A. Has Lively Convention

## Record Attendance Achieved at Denver Meeting June 27 and 28

*J. C. Jordan*

NEARLY 100 leading public utility companies were represented at the annual meeting of the Public Utilities Advertising Association, departmental of the International Advertising Association, at Denver, Colo., June 27 and 28.

J. Charles Jordan, advertising manager, Pacific Gas and Electric Co., San Francisco, Calif., was elected first vice-president and became acting president, when B. J. Mullaney, vice-president of The Peoples Gas Light and Coke Co., Chicago, Ill., declined to accept the position. Donald Mackie, Jackson, Mich., and J. M. Barnes, New Orleans, La., were elected vice-presidents. Charles W. Person, New York, N. Y., was reelected treasurer.

The newly elected directors are: Joseph E. Moorhead, Denver, Colo.; Geo. F. Oxley, New York, N. Y.; E. Frank Gardiner, Chicago, Ill.; George Ade Davis, Oklahoma City, Okla., and James Lightbody, Vancouver, B. C.

An interesting program, consisting of reports and addresses, was offered. Newspaper advertising, radio, etc., were covered, and much of practical value gained from the discussions that followed the formal papers. Two reports, on costs and results, and on better copy, also proved of great interest to the members.

The program was as follows:

JUNE 27

*Presiding:* Frank LeRoy Blanchard.

President's Address, Frank LeRoy Blanchard.

"Why National Utility Associations Believe in Advertising"—Paul S. Clapp, executive director, National Electric Light Association.

"How to Buy Radio Time and What to Do with It"—Henry Obermeyer, assistant to vice-president, Consolidated Gas Company of New York.

"Why Newspapers?"—J. C. McQuiston, advertising manager, Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.

Report of Committee on Costs and Results, by chairman, A. C. Watt, Hopendyl, Hardy & Company, New York, N. Y.

JUNE 28

*Presiding:* H. M. Lytle, vice-president, P. U. A. A., and vice-president, Chicago Rapid Transit Company, Chicago, Ill.

"The Future of Organized Advertising"—W. Frank McClure, chairman, Advertising Commission, and vice-president, Albert Frank & Company, Chicago, Ill.

"Percolators vs. Paris Hats—Advertising Appliances the Department Store Way"—Miss Dorothy Dignam, McJunkin Advertising Company, Chicago, Ill.

"Advertising—and Informing the Public"—Labert St. Clair, director of Advertising, American Electric Railway Association.

"Where Does the Agency Fit In?"—James O'Shaughnessy, executive secretary, American Association of Advertising Agencies.

Report of Committee on Better Copy, by chairman Irving M. Tuteur, McJunkin Advertising Company, Chicago, Ill.

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IN LONDON during the past 12 years sales of gas for industrial purposes have increased from 652,000,000 cu.ft. to 1,662,000,000 cu.ft., in that portion of the city served by the Gas Light and Coke Company. This is an increase of more than 154 per cent.

## School Pamphlets Prove Interesting to Teacher

THE following letter, received by Joe Carmichael, director of the Iowa Committee on Public Utility Information, Des Moines, Ia., is strong testimony to the value of the school pamphlets on gas, electricity, street railways, and telephone, that are being distributed by the American Gas Association.

Sample copies of the pamphlets will be sent to all requesting them. The price has been kept particularly low to encourage wide distribution, the cost being $13.75 a thousand for each pamphlet.

**OTTUMWA HIGH SCHOOL**
**Ottumwa, Iowa**

The Iowa Committee on
Public Utility Information,
Des Moines, Iowa.

In answer to your letter of recent date inquiring about the use of your bulletins in our classes, I am pleased to inform you that the literature which you so kindly furnished us was used to very good advantage in our courses in Physics and Chemistry.

A copy of "Manufactured Gas" was given to each student in my three chemistry classes during the past year. The students were asked to read and study the pamphlet in connection with the study of gaseous fuels in the text book, and were also requested to take the booklets home and urge their parents to read them. The response was very gratifying. Interest in the local gas plant was stimulated to the point where questions were asked by parents as well as students concerning operation of the plant. The study was supplemented by an inspection trip to the local gas plant where the employees very courteously guided the classes through the plant and explained its operation in detail. It is my opinion that a more cordial and sympathetic relationship exists between producer and consumer of gas after such a plan has been followed.

Students like the historical sketch, including the allusions to early experiments in the use of gas for lighting, and the explanation of how to read a gas meter. These things were not mentioned in the text book which we use. I am sorry that I can not offer suggestions for the betterment of the pamphlet. I can only compliment you and assure you that the literature which you sent to us was very interesting to practically all of the students.

Our Physics Department also made very good use of the "Electricity" booklet.

Thanking you for your cooperation in our educational program, I am

*Robert W. McLachian.*

## Committee on Competitive Fuels Supplies Data

THE Competitive Fuels Committee of the Industrial Gas Section has secured and made available to A. G. A. members interesting and pertinent data on the following subjects: Coppus combustion control, application of electricity to conveyor type of bake oven, oil gasifier, Economy combustion chamber, Homo method for tempering steel, and Gilbert oil fire.

R. H. Staniford, of The Brooklyn Union Gas Company, and chairman of the committee, has requested that all members cooperate in making data of this sort available by furnishing the committee with information on fuel activities being found in local territories.

Members may secure any of the data listed above by writing to Headquarters.

## Beal Medal to F. W. Sperr

(Continued from page 454)

family, specifying that the medal be awarded for the best technical paper presented at the annual convention of the American Gas Association.

Since provision for the award of the Beal Medal was first made, it has been given to the following:

Henry L. Doherty, A. G. Glasgow, I. N. Knapp, B. H. Spangenberg, H. L. Rice, W. H. Gartley, W. H. Fulweiler, C. J. Ramsburg, H. W. Alrich, L. E. Worthing, C. O. Bond, O. B. Evans, F. W. Steere, E. J. Brady, F. W. Sperr, Jr., Arthur Woodward Warner, and Ralph L. Brown.

**PAMPHLET AVAILABLE—FREE OF CHARGE**

**THE address presented by J. F. Owens, vice-president and general manager of the Oklahoma Gas and Electric Co., Oklahoma City, Okla., at the annual meeting of the International Advertising Association, at Denver, Colo., has been reprinted in pamphlet form by the Joint Committee of National Utility Associations.**

**This pamphlet, entitled "Business Is Good in America: Why Change It?" is proving popular for distribution to the general public. Copies may be had free of charge by writing to the American Gas Association, 420 Lexington Ave., New York, N. Y.**

*MANUFACTURERS SECTION*
W. E. STEINWEDELL, Chairman H. L. WHITELAW, Vice-Chairman
C. W. BERGHORN, Secretary

# Tests on Methods of Adjusting Regulators

## Research Points Out Most Advisable Way of Adjusting Heat Controls

By I. V. BRUMBAUGH
Research Laboratory, American Stove Co., St. Louis, Mo.

IT is believed that most manufacturers of gas ranges have made it their practice always to adjust the oven heat regulator when the oven is heated, after the temperature has become steady; also, to make the adjustment as shown by the temperature of an accurate thermometer. This usually requires a total of twenty to thirty minutes.

For some time information has been published, which describes how an oven heat regulator can be readily adjusted without heating the oven of the range. This method is usually advocated primarily because of the short time (about two minutes) required to complete an adjustment of this kind.

Briefly, the cold adjustment method consists of loosening or removing the stop so that the regulator can be turned backward beyond the low temperature markings until the point where the gas is cut off, except that which flows through the by-pass. This "cut-off point" is supposed to occur at a certain definite point on the dial. If not, then the dial is loosened and rotated to this point.

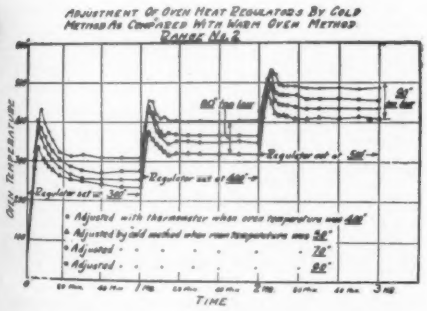
The "cut-off point" is somewhat difficult to determine. It is believed that cold adjustments attempted by different persons will vary considerably, owing to their difference of opinion of what corresponds to the "cut-off point."

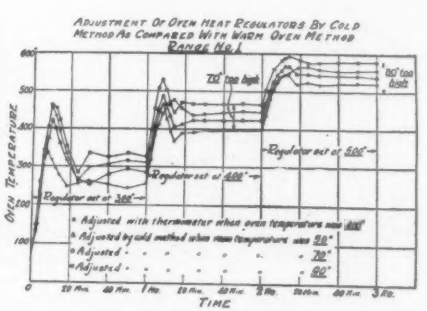
To make a cold adjustment of a regulator requires considerable skill. The method calls for rapid procedure, as stated before, because the adjustment must be made before the heat penetrates to the thermostatic element.

Recently it was considered advisable for our Research Laboratory to conduct an investigation of the cold method means of adjusting oven heat regulators.

The oven heat regulator on the three different makes of ranges was adjusted by the cold method according to the instructions that were furnished by the manufacturer.

It seemed reasonable to expect that the results would vary if a cold adjustment


ADJUSTMENT OF OVEN HEAT REGULATORS BY COLD METHOD AS COMPARED WITH WARM OVEN METHOD
RANGE No. 2
OVEN TEMPERATURE
TIME
Regulator set at 300°
Regulator set at 400°
Regulator set at 500°
Adjusted with thermometer when oven temperature was 400°
Adjusted by cold method when room temperature was 72°
Adjusted
Adjusted


ADJUSTMENT OF OVEN HEAT REGULATORS BY COLD METHOD AS COMPARED WITH WARM OVEN METHOD
RANGE No. 1
OVEN TEMPERATURE
TIME
Regulator set at 300°
Regulator set at 400°
Regulator set at 500°
Adjusted with thermometer when oven temperature was 400°
Adjusted by cold method when room temperature was 72°
Adjusted
Adjusted

were made at times when the room temperature was different. It was, therefore, decided to adjust each regulator by the cold method at three different room temperatures (50°, 70°, and 90°), and then to operate each regulator for one-hour periods at three different settings (300°, 400°, and 500°).

The following tabulation contains the average oven temperature that was obtained by the cold adjustment method during the second half of the hour.

| Regulator Setting (°F.) | Oven Temperature When Regulator Was Adjusted by Cold Method (°F.) Room Temperature (50°) | Room Temperature (70°) | Room Temperature (90°) |
|---|---|---|---|
| | RANGE NO. 1 | | |
| 300 | 290 | 315 | 335 |
| 400 | 425 | 445 | 470 |
| 500 | 545 | 555 | 580 |
| | RANGE NO. 2 | | |
| 300 | 235 | 255 | 275 |
| 400 | 320 | 350 | 365 |
| 500 | 410 | 435 | 455 |
| | RANGE NO. 3 | | |
| 300 | 285 | 335 | 335 |
| 400 | 430 | 455 | 465 |
| 500 | 545 | 560 | 575 |

On the two charts shown here are plotted the oven temperatures obtained by the cold adjustment of the regulator on Ranges No. 1 and No. 2.

The curves on these charts show at a glance how far the oven temperature disagreed with the setting of the regulator at different room temperatures. The inaccurate oven temperatures that were obtained by the cold adjustment method would cause failures in baking and other unsatisfactory oven cooking operations.

The temperature in the ovens of Ranges No. 1 and No. 3 was most inaccurate (*too high*) when the regulator was adjusted during the higher room temperature (90°).

The results were as follows:

| Regulator Setting | Oven Temperature Range No. 1 | Range No. 3 |
|---|---|---|
| 300° | 35° too high | 35° too high |
| 400° | 70° " " | 65° " " |
| 500° | 80° " " | 75° " " |

The oven temperature of Range No. 2, when adjusted by the cold method, was *too low* as follows (room temperature, 50°):

Regulator Setting, 300°—Oven Temperature was 65° too low
Regulator Setting, 400°—Oven Temperature was 80° too low
Regulator Setting, 500°—Oven Temperature was 90° too low

These figures serve to show to what extent the oven temperature varied from being accurate when the cold adjustment was made at a time when the room temperature was as stated.

A kitchen temperature of 100 degrees is regularly encountered during the summer months throughout a large portion of the United States, and a kitchen temperature of 50 degrees is certainly not uncommon in winter. A variation of 50 degrees in the kitchen temperature is unquestionably encountered.

Oven heat regulators cannot be satisfactorily adjusted by the cold oven method if no provision is made for the effect of room temperature.

Furthermore, it should be evident from a study of the data that the cold adjustment of the oven heat regulator on different makes of ranges does not produce the same results.

Consequently, in order to make adjustments by the cold method, which at best would only be approximately dependable, it would be necessary to determine for each make of range a different set of instructions. Also, the instructions would have to include corrections that would have to be applied in accordance with the temperature of the room at the time the cold adjustment is made.

It is very important to bear in mind that the temperature in the room does not in any way affect the adjustment of oven heat regulators when they are adjusted by the warm oven method.

## In Memoriam

*William P. Lane, Philadelphia Gas Works, Philadelphia, Pa.*

*Walter C. Coakley, Spokane Gas & Fuel Co., Spokane, Wash.*

*INDUSTRIAL GAS SECTION*
H. O. LOEBELL, Chairman F. C. MACKEY, Vice-Chairman
C. W. BERGHORN, Secretary

# Gas Is a Necessary Prop at Coney Island

## Gas-Fired Steam Boiler Works Behind the Scenes at Battle of Chateau Thierry at Luna Park

By JOHN GODSOE
Shop Superintendent, The Brooklyn Borough Gas Co., Coney Island, N. Y.

IN the midst of the crowds at Coney Island, where the merry-go-rounds spin to the tune of mechanical music and the bands play, the popcorn pops and the barkers bark, where the ocean breezes play along the boardwalk beach and all is fun and gaiety, is the "Battle of Chateau Thierry."

Here is War: Ripping and tearing the walls of picturesque French homes, searing the green turf and shredding the heavy foliaged trees — wreckage, barbed wire, motor lorries and soldiers, and an extremely unique installation of a gas-fired steam boiler.

The Cyclorama is 330 ft. in circumference and 46 ft. high. Three thousand sheets of galvanized iron were used as backings for the paintings. Six months was spent gathering data relative to the production, and eleven artists were employed in the reproduction. It took two years to complete and fourteen weeks to erect.

It is viewed from a raised platform in the center of the circular scenery and the topography is reproduced in minute detail. The distance from the audience platform to the horizon depicts a distance of forty miles and no stretch of the imagination is needed to vision oneself in the center of real country stretching off in all directions.

The control boards are directly

*Gas makes these battle scenes more realistic*

underneath the platform and are not visible to the audience, neither is any of the apparatus used in producing the spectacle. Many of the most up-to-date methods of stage craft are utilized to produce illusions. Gas, electricity, radio amplification, projectoscopes, cannon-sound producing machines and lighting effects, all play their parts.

The promoters of this spectacle decided that steam was the best medium for producing smoke, having none of its disadvantages such as odor and fire hazard. They also decided that gas as a medium for producing steam was unexcelled. They were supplied with a seven horsepower gas-fired steam boiler, automatically controlled.

This installation has been giving uninterrupted and adequate service since the opening of the cyclorama.

## Industrial Salesman's Book Soon Available

*Prof. E. E. Ferris*

THE book for industrial gas salesmen, titled, "The Industrial Gas Salesman," being sponsored by the industrial Gas Section Committee on Education of Salesmen, J. P. Leinroth, chairman, has been written by Professor Elmer E. Ferris, professor of salesmanship, New York University, School of Commerce, Accounts, and Finance, and the manuscript is now in the hands of the printer.

Mr. Leinroth has announced that the book will be available about September 1. The price will be $1.50 for members.

There is every reason to believe that the book will prove authoritative and be of great help to the salesman of gas for industrial purposes, according to Alexander Forward, managing director of the A. G. A.

"Professor Ferris has had a great deal of practical experience in sales work, having been a travelling salesman for 14 years and a sales manager for six," says Mr. Forward. "He has also spent ten years writing and lecturing on sales topics, and has been professor of salesmanship at N. Y. U. for seven years."

Professor Ferris has sold two different staple lines and one high-grade specialty. He has sold to the jobbing trade, the retail trade and the large consumer. His business connections are as follows: Salesman and sales manager, Phenix Cheese Co.; salesman, sales manager, and vice-president, Calumet Tea and Coffee Co.; salesman and sales coach, Alexander Hamilton Institute.

He has also lectured before numerous sales conventions and conferences for business concerns, such as N. Y. Edison Co., International Silver Co., Drugs Products Co., N. Y. Printers Ass'n, American Gas Ass'n, N. Y. Advertising Club, International Mercantile Marine, etc.

Professor Ferris is the author of several books dealing with salesmanship. Among them are: "Salesmanship," a textbook used by universities; "Developing Sales Personality," handbook for salesmen and sales managers; "Pete Crowther, Salesman," sales sketches, stories, etc.

"The Industrial Gas Salesman," will be a book of more than 100 pages. It will be attractively printed and bound.

Orders for the book can now be placed at Association Headquarters.

## Fifty More Industrial Data Sheets to be Available

THE Progress Committee of the Industrial Gas Section, H. A. Clark, chairman, is planning to have about 50 additional industrial gas data sheets available by the time of the October convention.

More than 1000 sets of these data sheets have been sold to date. The price is $.75 a set.

## Industrial Gas Booklet

MANY gas companies have found that the distribution of "Gas The Ideal Factory Fuel" to industrial prospects and customers is extremely valuable.

This is the booklet sent by the Association to those manufacturers who, on seeing the industrial gas advertisements in the trade papers, write for further information.

The Association has had many requests to supply quantities of these booklets directly to the gas companies. Copies can now be furnished at ten cents each.

Orders should be sent to Association Headquarters.

COMMERCIAL SECTION

J. J. BURNS, Chairman G. M. KARSHNER, Vice-Chairman

J. W. WEST, Jr., Secretary

# A. G. A. Fosters Allied Trade Cooperation

## Representatives Attend Meetings of Heating and Piping Contractors and Heating and Ventilating Engineers

IMPORTANT strides are being made by the gas industry in achieving closer cooperation with the allied trades, as evidenced at the recent annual meeting of the Heating and Piping Contractors National Association, at West Baden Springs, Ind., June 2-4, and the semi-annual meeting of the American Society of Heating and Ventilating Engineers, at White Sulphur Springs, W. Va., June 28-30.

H. Leigh Whitelaw, vice-president, American Gas Products Corp., and chairman of the House Heating Committee of the A. G. A., attended the former, and he and R. M. Conner, director, Testing Laboratory of the A. G. A., the latter, and both expressed the desire of the A. G. A. to establish and maintain close relations with the respective Associations.

### WEST BADEN SPRINGS

Mr. Whitelaw briefly outlined the reasons for the tremendous increase in domestic heating with gas during the last year or two and expressed his belief that other forms of using natural fuels, by comparison, were wasteful. He predicted universal acceptance of gas, both manufactured and natural, for this purpose and said that even the high rates per unit of gas, or of heat, would not prevent the use of gas because of its adaptability to automatic firing and control, the absence of noise, and the general cleanliness attending its use.

The report of the Committee on Trade Relations was read by Walter Klie, of Cleveland, salient points of which were:

"We must recognize that the American public is ever demanding and is willing to pay for comfortable homes, free from drudgery and dirt, and gas represents the only perpetual heating service that can be purchased today.

"Our local associations should endeavor to bring about a trade relation with their local gas company that has been endorsed by our national association and by the American Gas Association.

"That the endorsement of the A. G. A. Laboratory, which was done at our last meeting, offers us a protection that we cannot very well ignore.

"That gas for heating is already developed to such a stage that it is no longer confined to house heating, but includes buildings of all kinds, of any size."

The benefits of this policy for the heating and piping contractors were brought out.

In order to set up the functions and relationship of a gas company and each local association, the controlling factors that govern were set forth as follows:

"Factors controlling the gas company: 1. The gas company completely controls all factors governing the installation and location of a gas-fired boiler. 2. Correct estimates of fuel consumption, protecting the gas company against high bill complaints and loss of good will. Elimination of exaggerations in selling a high class fuel against any other fuel. 3. Such control insures maximum protection to the gas company, heating contractor and owner, and provides the gas company with unusual powers to enforce our heating standards."

At the meeting of the American Society of Heating and Ventilating Engineers, R. M. Conner, director of the

Testing Laboratory of the American Gas Association, outlined the activities of his organization, which he characterized as determining minimum standards for construction and operation of gas equipment. He said that, with the great increase in the use of gas for domestic heating—some gas companies metering fifty per cent of their send-out for this purpose—the testing of gas-fired boilers would soon occupy the laboratory.

S. R. Lewis laid before the meeting a report of an informal gathering held previously, at which was discussed the possibility of securing, through a joint committee, a complete coordination of all research on these lines that might be under way or contemplated.

Through the activities of Mr. Lewis, the meeting was attended by nearly a score of representatives of national organizations interested, either directly or indirectly, in heating and ventilation problems pertaining to health and comfort. He reported that this group had devoted nearly three hours to a comprehensive discussion, and had arrived at a point where he had been instructed to appoint a committee of three to make a survey and report to a meeting to be called in the early fall for consideration of its findings. This committee consists of R. M. Conner, American Gas Association, J. C. Fitts, Heating and Piping Contractors' National Association and F. C. Houghten, of the society.

## Canada Ties-In

(Continued from page 478)

proval to our Laboratory in Cleveland, Ohio. The test fees and rules governing their submission will be substantially the same as those now in force for appliance manufacturers in the United States.

Certificates of Approval for Canadian appliances that satisfactorily meet all Laboratory tests will doubtless be issued through the office of the Secretary of the Canadian Association, although matters of this and of a similar nature will be decided definitely later on.

The recognition of the American Gas Association Laboratory and the acceptance of its test findings carries with it the adoption of the A. G. A. Appliance Approval Requirements. Later, a number of gas company and appliance manufacture members of our Association, who also belong to the Canadian Gas Association, will probably be added to our General Requirements Committee and some of the Sub-Committees. Members of the Canadian Gas Association have always been quite active in the criticism of all our Approval Requirements prior to their adoption.

The recognition of our gas appliance testing requirements by the Canadian Gas Association and their support by a number of the leading engineering societies and associations of the United States now make them standard over the entire North American Continent. This action is directly in line with the importance being given scientific testing and research by all major industries and an acknowledgment of the important part it is to play in the future conduct of our business. It also coincides with the thought being sponsored by the United States Department of Commerce, designed to affect the co-ordination of all kinds of research work by centralizing our research and appliance testing activities in one large national institution, thereby eliminating for all time a useless duplication of effort, and resulting in increased efficiency.

## Why Eliminate Uniform Rates?

(Continued from page 466)

hours of the day and throughout the year at a higher load factor than domestic use, in which latter class there may be a seasonal peak load. Stimulation of large sales and greater use by the industrial customer is in the interest of the domestic and commercial customer, because increased volume of sales tends to lower certain costs and thereby permit more favorable rates.

## Mid-West Sales Conference Papers Are Now Available

THE following papers, presented at the Mid-West Sales Conference at Chicago, are now available in printed pamphlet form. The price for the complete set is $1. Single copies are sold at $0.10 each, with the exception of the first four papers, which cost $0.05.

Remote Control of Tank Water Heaters, by J. T. Hammack.

Selling Gas to Prospective Home Builders, by Geo. C. Klopf.

Selling Auxiliary Heating, Including Garage Heating, by J. Frank Jones.

Building the Load with Incinerators in Milwaukee, by R. O. Jasperson.

Marketing Gas for Automatic Water Heating, by B. H. Gardner.

A Plan for Merchandising Refrigeration, by J. J. Burns.

Selling Gas Ranges in Small Towns, by M. F. North.

Selling Blue Star Appliances, by R. J. Canniff.

What the Central Station Fuel Bin Offers, by F. C. Mackey and W. F. Miller.

Selling Gas in the Domestic Laundry, by Chas. A. Luther.

Supervising Salesmen and Sales Methods, by G. C. Carnahan.

Home Service as an Aid to Gas Sales, by P. D. Warren.

Increasing Sales by Window Displays, by S. C. Rieser.

Selling Gas Ranges in a Large City, by A. W. Baker.

Copies of the pamphlets may be ordered from J. W. West, Jr., secretary, Commercial Section, A. G. A., or through the Editor of the MONTHLY.

## Window Display Service Offered By Committee

THE Window Display Committee of the Commercial Section, S. C. Rieser, Laclede Gas Light Co., St. Louis, Mo., chairman, is now rendering an important service to member companies, giving advice of one sort or another on window display matters. The number of inquiries received averages ten a month.

Mr. Rieser requests that all companies desiring help in their display problems write to the committee, outlining the aid needed.

The committee is also at work on a window display manual, containing illustrations of displays and suggestions.

## TO PROTECT THE GAS CONSUMER

**THE American Gas Association, made up of companies engaged in the production of artificial gas, has established in Cleveland a laboratory for the purpose of testing appliances connected with the use of gas for heating, cooking and lighting purposes. All gas companies sell to their consumers appliances for domestic use. In addition, many such appliances are offered by other than gas-producing companies. The gas companies always have guaranteed their own appliances, but have not been in position to guarantee those sold by others. It came to be realized that in the case of inferior appliances, not purchased from the gas companies, consumers not infrequently became dissatisfied with gas as a cooking or heating agent and discontinued their use. Upon realization of this disposition manifested by the gas-using public, the gas companies undertook to establish the laboratory at Cleveland, at which every appliance offered by manufacturers will be tested for the purpose of ascertaining its reliability and general suitability. All such appliances that are approved will be awarded the "Blue Star Seal."**

**Assuming the good faith of the American Gas Association in this matter, that is, that the Blue Star Seal will be awarded to all appliances that stand the test, without reference to whether they are sold by the member companies of the association or not, the movement to standardize and guarantee the efficiency of all appliances offered the public is one which cannot fail to redound to the benefit of gas producers. It would seem that manufacturers of such appliances could not afford to ignore the opportunity to obtain the Blue Star Seal label for their products. It is likely that housewives who use gas in their kitchens soon will come to look for the Blue Star Seal label in purchasing appliances and will refuse to purchase unless the appliance sought carries it. If the gas companies themselves will stick to a cast-iron rule to handle only Blue Star Seal appliances, it should be an easy matter to force other dealers to do likewise.—Editorial appearing in the June 23 issue of the Petersburg, Va., "Index."**

## Blue Star Edition

A RECENT issue of the *Old Colony News*, published by the Old Colony Gas Company, East Braintree, Mass., was almost entirely devoted to the Blue Star plan of merchandising, and the Blue Star home idea. The magazine, containing 12 pages, was very well illustrated, and the material was presented in an interesting fashion.

## London Journal Editorializes

(Continued from page 489)

once. As an added precaution, of course, our Approval Seal is copyrighted.

"The Laboratory maintains a corps of inspectors to examine all approved appliances and see that the rules and regulations governing their approval are carried out in every respect. These men are constantly on the alert for any infraction of our rules. Further than this, we find that the manufacturers themselves are very efficient inspectors, as they are continually studying competitive products and whenever it is found that misrepresentation is being practiced, they are the first ones to notify us. Fortunately, we have had very, very few instances of this kind.

"Our testing standards, or approval requirements as they are called, are minimum requirements for safe and efficient performance and reasonably durable construction. Our members and the trade know and are advised of the fact that our requirements are minimum standards, and we are frank to admit if questioned that appliances are manufactured which exceed these requirements. For example, our standards do not specify that a gas range must be equipped with an oven heat regulator, although we have approval tests for them providing they are supplied. This means, therefore, that all appliances bearing the Blue Star Seal of Approval do not necessarily possess the same merits. Further we always encourage purchase of the highest quality of appliance that the customer can afford. In passing this point, however, it should be borne in mind that after all the performance of the appliance is the most important item, and we are most interested first in a reasonable figure of efficiency and a high factor of safety governing completeness of combustion. Matters of construction we believe are of secondary importance, and where accessories or added convenience factors are supplied they should justify themselves from a commercial standpoint; generally speaking, it is proven that they do."

## Quebec Does It With Gas

(Continued from page 486)

Even by calculating the conversion of electricity into heat without any losses whatever, that is at 100 per cent efficiency; and coal, owing to certain unavoidable losses through the chimney, etc., at 50 per cent efficiency, the cost of coal, according to the most competent scientific authorities, would have to rise to not less than $52.70 a ton before the cost of heating by means of coal would equal that of heating by electricity, even at the low rate of one and one-half cents per kilowatt hour, if such a low rate was possible (which it is not), as has been shown by the Quebec Public Service Commission.

The heating of homes is required, of course, in the winter months only—a still further difficulty in supplying electric energy for heating on an extensive scale —and to supply a city like Montreal would require the investment of hundreds of millions of dollars for plants which would remain idle during half of the year.

Figures and statements such as the foregoing, which are based on incontrovertible facts, answer the question in the negative for all time as to whether the water powers of Canada will ever entirely solve the fuel problem in a climate such as Quebec and Ontario.

To promote the use of electricity for heating on an extended scale would be economically unsound in Canada where such an enormous amount of energy would be required for this purpose alone, as all other fields of application for electric energy would suffer seriously thereby.

At existing rates for coal and other fuels, compared with those for electricity, electric heating is too expensive to be adopted extensively, but as an auxiliary its advantages warrant its use within certain limits even at higher cost; particularly as the load from this source is not likely to prove disturbing as in the case of complete house heating.

TECHNICAL SECTION
WALTER C. BECKJORD, Chairman HARRY E. BATES, Vice-Chairman
H. W. HARTMAN, Secretary

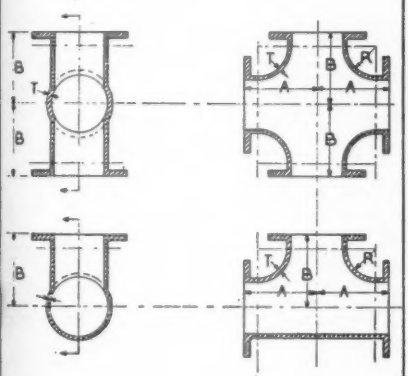
# Dimensions for Flanged Material Adopted as Tentative Standard

By WALTON FORSTALL
Chairman, Committee on Cast Iron Pipe Standards

THE Managing Committee of the Technical Section has adopted as a tentative standard to be incorporated in the present standards for cast iron pipe and special castings the dimensions shown in the drawings for flanged material in sizes 54", 60", 66", and 72".

Pending the publication of a revised edition of the Standard Specifications, members are requested to use the following data in connection with their present copies of the Specifications. Additional copies of these prints can be obtained by writing to Association Headquarters.

CROSSES AND TEES




| NOMINAL DIAMETER | DIMENSIONS IN INCHES | | | |
|---|---|---|---|---|
| INCHES | A | B | R | T |
| 54 | 40 | 40 | 7.87 | 1.35 |
| 60 | 42 | 42 | 6.60 | 1.39 |
| 66 | 47 | 47 | 8.30 | 1.49 |
| 72 | 52 | 52 | 10.03 | 1.62 |

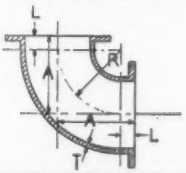
LARGE SIXTEENTH BENDS

| NOMINAL DIAMETER | DIMENSIONS IN INCHES | | | |
|---|---|---|---|---|
| INCHES | A | L | R | T |
| 54 | 11.46 | 3.80 | 38.50 | 1.35 |
| 60 | 12.12 | 4.00 | 40.80 | 1.39 |
| 66 | 13.21 | 4.20 | 45.30 | 1.49 |
| 72 | 14.27 | 4.30 | 50.10 | 1.62 |

LARGE EIGHTH BENDS

| NOMINAL DIAMETER | DIMENSIONS IN INCHES | | | |
|---|---|---|---|---|
| INCHES | A | L | R | T |
| 54 | 18.79 | 3.80 | 36.20 | 1.35 |
| 60 | 19.74 | 4.00 | 38.00 | 1.39 |
| 66 | 21.93 | 4.20 | 42.80 | 1.49 |
| 72 | 24.06 | 4.30 | 47.70 | 1.62 |

QUARTER BENDS




| NOMINAL DIAMETER | DIMENSIONS IN INCHES | | | |
|---|---|---|---|---|
| INCHES | A | L | R | T |
| 54 | 40 | 3.80 | 36.20 | 1.35 |
| 60 | 42 | 4.00 | 38.00 | 1.39 |
| 66 | 47 | 4.20 | 42.80 | 1.49 |
| 72 | 52 | 4.30 | 47.70 | 1.62 |

## Safety Poster Contest Suggested By Committee

THE Accident Prevention Committee, E. S. Beaumont, chairman, has recommended to the Association that a safety poster contest be inaugurated, with prizes of $50, $25, $15, and $10 offered for the best safety posters involving hazards met in the gas industry.

Due announcement of this will be made in an early issue of the MONTHLY.

## OUR NEW MEMBERS

GAS COMPANY MEMBERS

The Depew & Lancaster Light, Power & Conduit Co., Central & Brady Aves., Lancaster, New York.

MANUFACTURER COMPANY MEMBERS

J. & G. Brass Company, William St., South River, N. J.

Felt & Tarrant Mfg. Co., 1717 N. Paulina St., Chicago, Ill.

Jamestown Metal Desk Co., Inc., 104 Blackstone Ave., Jamestown, N. Y.

Mustee Heater Co., 3409 Superior Ave., Cleveland, Ohio.

Carborundum Company, The, Perth Amboy, N. J.

Underwood Typewriter Co., Inc., 30 Vesey St., New York, N. Y.

ACTIVE MEMBERS

Hall, Edwin L., United Gas Improvement Co., 1401 Arch St., Philadelphia, Pa.

Fladoes, Miss Karen, Equitable Gas Co., 435 Sixth Ave., Pittsburgh, Pa.

Setchell, John E., The Brooklyn Union Gas Co., 176 Remsen St., Brooklyn, N. Y.

Imse, Paul J., Milwaukee Gas Light Co., 182 East Wisconsin Ave., Milwaukee, Wis.

Jasperson, Robert O., Milwaukee Gas Light Co., 182 E. Wisconsin Ave., Milwaukee, Wis.

Johnson, Robert J., Milwaukee Gas Light Co., 182 E. Wisconsin Ave., Milwaukee, Wis.

Mueller, Norman P., Milwaukee Gas Light Co., 182 E. Wisconsin Ave., Milwaukee, Wis.

Porath, Walter, Milwaukee Gas Light Co., 182 E. Wisconsin Ave., Milwaukee, Wis.

Trister, Gustave A., Milwaukee Gas Light Co., 182 E. Wisconsin Ave., Milwaukee, Wis.

Bonham, Lester D., Public Service Company of Colorado, Denver, Colo.

Eve, William F., Jr., Federated Utilities Inc., 209 So. La Salle St., Chicago, Ill.

Harmel, G. A., The Detroit Edison Co., Port Huron, Mich.

Timmins, Harold Ernest, Can. West. Nat. Gas, L. H. & Power Co., Ltd., 215—6 Ave. West, Calgary, Alberta, Canada.

King, Russell M., Westchester Lighting Co., 45 So. Broadway, Yonkers, N. Y.

Bellows, Edwin S., Westchester Lighting Co., 45 So. Broadway, Yonkers, N. Y.

Banner, F. L., Union Gas & Electric Co., 316 N. Main St., Bloomington, Ill.

Merna, Wm. R., Union Gas & Electric Co., 316 N. Main St., Bloomington, Ill.

Dennis, Kenneth H., Consolidated Gas, Electric Light & Power Co., Baltimore, Md.

Lefferson, Leroy, Electric Bond & Share Co., New York City.

Baldwin, T. Bruce, Consolidated Gas, Electric Light & Power Co., Baltimore, Md.

McPhail, R., Citizens Gas Fuel Co., Adrian, Michigan.

Naylor, John E., Peoples Gas Light & Coke Co., Chicago, Ill.

Sterk, Henry J., Peoples Gas Light & Coke Co., Chicago, Ill.

Price, Glendale M., Public Service Electric & Gas Co., Newark, N. J.

Brenan, Herbert C., Consolidated Gas Co., New York City.

Jones, Walter L., The St. Louis County Gas Co., Webster Groves, Mo.

Taber, Stanley, Nebraska Gas & Electric Co., Lincoln, Nebr.

Sykes, John W., William A. Baehr Organization, Chicago, Ill.

Rockefeller, Joseph Andrew, Public Service Electric & Gas Co., Newark, N. J.

Roche, Charles H., Public Service Electric & Gas Co., Englewood, N. J.

Bouton, Harry Rodman, Public Service Electric & Gas Co., Plainfield, N. J.

Schouten, S. N., Public Service Electric & Gas Co., Englewood, N. J.

Cronkright, Clayton S., Public Service Electric & Gas Co., Newark, N. J.

Stapleton, J. H., Public Service Electric & Gas Co., Newark, N. J.

Surbeck, Howard Frank, Public Service Electric & Gas Co., Newark, N. J.

Dreher, Casper A., Public Service Electric & Gas Co., Newark, N. J.

Hart, Kimber De, Public Service Electric & Gas Co., Newark, N. J.

Reed, David A., City Water & Light Dept., Duluth, Minn.

Lane, John Appleton, Public Service Electric & Gas Co., East Orange, N. J.

Bittner, G. Albert, Public Service Electric & Gas Co., Newark, N. J.

Crawford, Fred Eldridge, Public Service Electric & Gas Co., Camden, N. J.

Hutchins, H. Cuyler, Public Service Electric & Gas Co., Camden, N. J.

Proctor, George Nelson, Public Service Electric & Gas Co., Passaic, N. J.

Kelly, Charles G., Camden Coke Co., Camden, N. J.

Hendey, Frederick H., Public Service Electric & Gas Co., Passaic, N. J.

Leamy, Mrs. Edmund, Central Hudson Gas & Electric Corp., Poughkeepsie, N. Y.

Hinchliff, E. L., Middle West Utilities Co., Chicago, Ill.

Foulds, Henry W., Servel Corp., New York, N. Y.

Galloway, Edward W., Western Gas Construction Co., Ft. Wayne, Ind.

Hudson, Willis F., Hoover Co., North Canton, Ohio.

# Associations Affiliated with A. G. A.

*K. R. Boyes, Secretary*

**Canadian Gas Association**
Pres.—P. V. Byrnes, United Gas & Fuel Co., Hamilton, Ont.
Sec.-Tr.—G. W. Allen, 7 Astley Avenue, Toronto.
Conv., Hamilton, Ont., 1928.

**Empire State Gas and Electric Association**
Pres.—H. M. Brundage, Consolidated Gas Co. of New York, New York, N. Y.
Chairman Gas Section—J. E. Cooper, Utica Gas & Electric Co., Utica, N. Y.
Sec.—C. H. B. Chapin, Grand Central Terminal, New York, N. Y.
Conv., Lake Placid Club, Lake Placid, N. Y., Oct. 6 & 7, 1927.

**Illinois Gas Association**
Pres.—P. D. Warren, The Peoples Gas Light & Coke Co., Chicago, Ill.
Sec.-Tr.—R. V. Prather, 305 Illinois Mine Workers Bldg., Springfield, Ill.
Conv., 1928.

**Indiana Gas Association**
Pres.—I. C. Shepard, Southern Indiana Gas & Elec. Co., Evansville, Ind.
Sec.-Tr.—F. B. Tracy, Central Indiana Gas Co., Muncie, Ind.
Conv., 1928.

**Michigan Gas Association**
Pres.—F. W. Steere, Semet-Solvay Co., New York, N. Y.
Sec.-Tr.—A. G. Schroeder, Grand Rapids Gas Light Co., Grand Rapids, Mich.
Conv., 1928.

**Mid West Gas Association**
Pres.—C. A. Nash, United Light & Railway Co., Davenport, Iowa.
Sec.-Tr.—A. W. Schmidt, Des Moines Gas Co., Des Moines, Iowa.
Conv., 1928.

**Missouri Association of Public Utilities**
Pres.—W. H. Henby, St. Louis County Water Co., St. Louis, Mo.
Sec.-Tr.—F. D. Beardslee, 315 N. 12th St., St. Louis, Mo.
Conv., 1928.

**New England Gas Association**
Pres.—William Gould, Gas and Electric Improvement Co., Boston, Mass.
Secretary—E. A. Taylor, 100 Weybosset St., Providence, R. I.
Chairman Operating Div.—A. H. Scott, New Britain Gas Light Co., New Britain, Conn.
Secretary Operating Div.—F. E. Drake, Lynn Gas & Electric Co., Lynn, Mass.
Pres. Sales Div.—M. B. Webber, Marlboro-Hudson Gas Co., Boston, Mass.
Sec.-Tr.—Sales Div.—J. H. Sumner, 719 Massachusetts Ave., Cambridge, Mass.
Pres. Industrial Div.—E. W. Berchtold, Boston Con. Gas Co., Boston, Mass.
Sec.-Tr. Industrial Div.—L. E. Wagner, Providence Gas Co., Providence, R. I.
Chairman Acctg. Div.—W. A. Doering, Boston Con. Gas Co., Boston, Mass.
Sec.-Treas. Acctg. Div.—Otto Price, Boston Con. Gas Co., Boston, Mass.
Conv., 1928.

**New Jersey Gas Association**
Pres.—J. L. Conover, Public Service Electric & Gas Co., Newark, N. J.
Sec.-Tr.—Louis Stoecker, Public Service Electric & Gas Co., Newark, N. J.
Conv., 1928.

**Oklahoma Utilities Association**
Pres.—E. R. Ernsberger, Southwestern Light & Power Co., Oklahoma City, Okla.
Mgr.—E. F. McKay, Oklahoma City, Okla.
Conv., second week March, 1928.

**Pacific Coast Gas Association**
Pres.—W. S. Yard, Pacific Gas & Electric Co., San Francisco, Calif.
Exec. Sec.—Clifford Johnstone, 447 Sutter St., San Francisco, Calif.
Conv., Santa Cruz, Calif., Sept. 12-16, 1927.

**Pennsylvania Gas Association**
Pres.—J. A. Weiser, Peoples Light Co., Pittston, Pa.
Sec.-Tr.—Geo. L. Cullen, Harrisburg Gas Co., Harrisburg, Pa.
Conv., 1928.

**Southern Gas Association**
Pres.—P. S. Arkwright, Georgia Railway & Power Co., Atlanta, Ga.
Sec.-Tr.—J. P. Connolly, 141 Meeting St., Charleston, S. C.
Conv., 1928.

**Southwestern Public Service Association**
Pres.—M. T. Walker, Southwestern G & E Co., Shreveport, La.
Chairman Gas Section—C. M. Thompson, Texas Power & Light Co., Waco, Texas.
Sec.—E. N. Willis, 403 Slaughter Bldg., Dallas, Texas.
Conv., 1928.

**Wisconsin Utilities Association**
Pres.—John St. John, Madison Gas & Electric Co., Madison, Wis.
Exec.-Sec.—J. N. Cadby, 445 Washington Bldg., Madison, Wis.
Conv., 1928.

## Geographic Divisions

**Eastern States Gas Conference**
Pres.—H. H. Newman, Public Service Electric & Gas Co., Trenton, N. J.
Sec.-Tr.—J. C. Smith, Consumers Gas Co., Reading, Pa.
Conv., 1928.

**Ninth Annual Convention of the American Gas Association**
**Chicago, Ill. Stevens Hotel Oct. 10-14, 1927**

# Employment Bureau

## (Address All Communications to Key Number)

### SERVICES REQUIRED

WANTED by large gas company in middle west, salesman for industrial gas appliances. Address A. G. A.
Key No. 073.

SALESMEN—Large Public Utility Company operating in Central New York and many other states desires to employ several securities salesmen to sell company securities. Excellent opportunity. State salary, age, experience, married or single. Address A. G. A.
Key No. 080.

SALESMAN—Chiefly for gas-fired steam radiators, also other gas appliances to work in New York City. One acquainted with plumbing and heating trade preferred. Salary and commission basis. Address A. G. A.
Key No. 094.

DIVIDEND DEPT. SUPERVISOR—Large public utility system with principal accounting offices located in New York State (outside New York City) requires the services of man capable of assuming supervision of Dividend Paying Department for approximately 50,000 holders and growing rapidly. Accounting experience desirable; knowledge of dividend work necessary. State age, experience, religion, present employer and salary expected. Information will be considered strictly confidential. Address A. G. A.
Key No. 0104.

PUBLIC UTILITY ACCOUNTANT—A splendid opportunity for several men under 35 is available in Accounting Department of large public utility system whose principal accounting office is in New York State. Applicant must have accounting education as well as familiarity with modern public utility accounting methods. Position is in newly created unit to engage in revision of present and planning of new accounting methods throughout system. State age, experience, religion, nationality, present employer and salary expected. Information to be considered strictly confidential. Address A. G. A.
Key No. 0105.

WANTED—Sales Representatives for industrial gas appliances and burners by manufacturer of trade name line. Commission. Have openings in Chicago, St. Louis and a few other industrial centres. Address A. G. A.
Key No. 0106.

SALESMEN—Well-known manufacturer of water heaters is in need of local representatives in several cities. The type of man wanted should be about 30 to 35 years of age, well educated, healthy, good business experience including direction of other employees. Reply, giving full qualifications, present connection and salary. Treated in confidence. Inclose photo if available. Address A. G. A.
Key No. 0107.

AGENTS WANTED to sell some of the latest type quick-acting thermostats to Gas Companies and Plumbers; also to act as manufacturers' agents. State commission required, present occupation, personal and bank references. Address A. G. A.
Key No. 0108.

### SERVICES OFFERED

AGGRESSIVE COMMERCIAL MANAGER—34 years of age, available October or November. Thoroughly familiar, Industrial, Commercial and Domestic Sales Promotion. Address A. G. A.
Key No. 220.

ACCOUNTANT and Office Manager with wide experience in management, purchasing and all office details. Address A. G. A.
Key No. 223.

POSITION wanted as Superintendent of small gas company or as General Foreman of large plant. Approximately seventeen years' experience in all branches of manufacture and distribution, high and low pressure systems. Address A. G. A.
Key No. 224.

POSITION as manager of small gas or combination gas and electric property or as commercial manager of a larger property by a man thoroughly reliable with wide experience and a record for producing results. Address A. G. A.
Key No. 226.

CHEMICAL ENGINEER—with 7 years' experience in the testing and developing of different classes of gas appliances also familiar with the testing and utilization of natural gas and manufactured gas—A-1 references. Address A. G. A.
Key No. 227.

YOUNG ENGINEER—22 years of age, unmarried, with no objection to any part of the country wishes a position as Industrial Engineer in the Gas Industry. Has a knowledge of applications of heat and how to compute requirements. Employed at present as Assistant Industrial Engineer. Address A. G. A.
Key No. 228.

A GRADUATE of California University desires a position as Private Secretary and Stenographer, has considerable experience in Utility work and can give satisfactory references. Address A. G. A.
Key No. 229.

COMMERCIAL OR SALES DEPARTMENT MANAGER—15 years' experience in new business department and appliance sales activities and management, with gas and electric companies. Three years purchasing department manager. Technical University graduate. Desires connection with large company as commercial or merchandising manager, or to supervise commercial activities for a group of properties. Service available on short notice. References include present employer. Address A. G. A.
Key No. 230.

POSITION—Sales Department with manufacturer of gas appliances or gas company. Experience includes executive training. Would prefer position in the East. References. Address A. G. A.
Key No. 231.

EXECUTIVE—Unusually broad training and experience operating and managing utilities—gas, electric, water, ice; directing new business activities, commercial and public relations; cost analysis; rate designing; investigation, purchase and sale of properties, etc. Location immaterial. Present address, New York. Address A. G. A.
Key No. 232.

A NOMINAL SALARY that any small plant can afford with a percentage of savings earned, based on the previous five years' operation is all that I ask as Manager or Superintendent of a small gas company or Operating Engineer of a larger company. Address A. G. A.
Key. No. 233.

CHEMICAL ENGINEER, fifteen years' experience water and coal gas, desires position where results count. Chemical control of operation especially water gas. Address A. G. A.
Key No. 234.

WANTED—Position by young woman, B.S. in Chemistry as technologist, in library or in home service department. Nine Years' experience. Address A. G. A.
Key No. 235.

COMMERCIAL OR SALES MANAGER with fine record of achievement, available for northern location near future. Responsible for one of the outstanding gas properties of 1926. Capable organization and operation of complete commercial department including sales, advertising and publicity and public relations. Vitally interested in heating and refrigeration load. Contract on salary and commission basis. Southern climate unsuitable reason for change. Address A. G. A.
Key No. 236.

ACCOUNTANT, AUDITOR, COMPTROLLER 20 years' experience with large Utility Organizations, in all phases of modern accounting, audits, financial management and budget systems. Christian, 42, married. Available immediately. Salary reasonable. Address A. G. A.
Key No. 237.

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